

HARYANA DISTRICT GAZETTEERS



KARNAL



सत्यमेव जयते

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GAZETTEER OF INDIA

HARYANA



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KARNAL

FOREWORD

A District Gazetteer is the many-faceted compendium of information pertaining to a district. It is a multipurpose hand book dealing not merely with geographical data; it is essentially a narration of the socio-economic changes which take place in the district. The book, therefore, concerns itself with the people and their environs viewed in the context of historical change.

Since the formation of Haryana, eight years back, progress in this new State has been rapid. The entire socio-economic pattern has been completely transformed and it can be said that within this period the State has achieved a break-through vitally affecting the welfare and prosperity of the people. The present book is an attempt to portray the all round progress made by the district since the last publication.

I am thankful to Dr K.C. Khanna who revised the volume before its publication and, in particular, to the Chief Minister and the Revenue Minister for the support given by them to the Gazetteers staff.

सत्यमेव जयते

Chandigarh,
March 17, 1976.

S. D. Bhambri
Chief Secretary
and
Financial Commissioner, Revenue,
Haryana.

PREFACE

The Gazetteer of Karnal is the second in the series of District Gazetteers which are being brought out by the Government of Haryana in collaboration with the Central Gazetteers Unit of the Government of India. The Gazetteer of the Karnal district was first published in 1883-84, then in 1892 and the last edition was out in 1918. Since then, momentous changes have occurred following the independence of the country and the resettlement of thousands of people from West Punjab in this area. In particular, development has been phenomenal, after the formation of Haryana, in all spheres of socio-economic activity. The economy of the State has been transformed and spectacular results have been achieved in the matter of rural electrification, road building programme, agricultural production, etc.

The Gazetteer of Karnal gives an eloquent commentary on the political, social and economic reforms introduced after Independence and in particular after the formation of Haryana. As such, this Gazetteer is not only a geographical lexicon but reflects the multiplicity of changes affecting the lives of the people. In January 1973, a separate district of Kurukshetra was carved out but the present volume gives an integrated picture of the erstwhile district of Karnal including the part which now forms Kurukshetra district.

The Gazetteer has been modelled on the pattern laid down by the District Gazetteers Unit of the Government of India.

The production of this book has been a co-operative endeavour. The material was collected by the State Gazetteers Unit with the help of field staff from various departments,

(ii)

The Chapter on 'History' was scrutinized by the late Dr Buddha Prakash of Kurukshetra University. Dr K. C. Khanna examined the entire manuscript with a view to editing and improving it. Dr P. N. Chopra, Editor, District Gazetteers Unit, Government of India, gave us several useful suggestions to improve the quality of the publication. After the transfer of Shri Sudarshan Kumar, Editor during the middle of project, Shri B. Raj Bajaj, Editor, handled the assignment with competence. My thanks are due to all these esteemed collaborators.

Chandigarh,
March 17, 1976.

V. P. Dhir, IAS,
State Editor Gazetteers and Deputy
Secretary to Government, Haryana,
Revenue Deptt.



CONTENTS

	Pages
Foreword	
preface	
CHAPTER I—GENERAL	1—15
Origin of the name of the district	1
Location, boundaries, area and population	1
History of the district as an administrative unit	2
Sub-divisions, tahsils and thanas	4
Topography	5
Natural drainage	6
River system	7
Geology	9
Economic minerals—9	
Flora	10
Fauna	12
Climate	13
CHAPTER II—HISTORY	17—51
The ancient period	17
The medieval period	20
The modern period	37
Uprising of 1857,-44, Growth of political struggle-47	
CHAPTER III—PEOPLE	53—111
Population	53
Language	59
Religious life	60



(ii)

Superstitions	..	69
Festivals and fairs	..	70
Social life	..	74
Social groups-74, Joint family system-77, Inheritance-78, Marriage customs and morals-80, Other rituals and customs-86, Position of women-87		
Home life	..	89
Villages-89, Dwellings, Furniture and utensils-89, Dress and ornaments-92, Food-93		
Community life	..	94
Folk culture-95, Games and recreations-99, General-101		
Rehabilitation	..	102
Introduction-102, Rural rehabilitation-104, Agricultural loans-105, Rural housing-105, Urban rehabilitation-106, Housing schemes-106, Small urban and house building loans-108, Payment of compensation-110, Socio-economic blend-110		

CHAPTER IV—AGRICULTURE AND IRRIGATION .. 113—170

Land Utilisation	..	113
Irrigation	..	118
Canal irrigation-120, Well irrigation-128, Tank Irrigation-131, Flood-embankments and marginal bunds-132		
Agriculture	..	133
Soils-134, crops-135, Fruit crops and gardens-140, Agricultural implements-141, Seeds-142, Manures and chemical fertilizers-144, Crop rotation-147, Agricultural pests and diseases-148, Agricultural co-operatives-150		
Animal Husbandry	..	152
Cattle and buffaloes-153, Sheep breeding-157		

(iii)

Horses and ponies, donkeys and mules, poultry
farming and piggery-158, Animal diseases and
veterinary hospitals-159, Dairy farming-160

Fisheries	..	161
Forestry	..	163
Natural calamities	..	166
Floods-166, Famine-169		

Augmentation Canal Project	..	170(a)
Haryana Milk Foods, Pehowa	..	170(c)

CHAPTER V—INDUSTRIES .. 171—187

Old-time industries	..	171
Government assistance to industries	..	173
Source of power	..	175
New industries and manufactures	..	176

Large and medium-scale industries-176,
Small-scale industries-177, Cottage
and village industries-180,
Handicrafts-182, Agro-based industries-182,
Town-wise distribution of industries-183

Industrial labour	..	184
Industrial co-operatives	..	186

CHAPTER VI—BANKING, TRADE AND COMMERCE .. 189—204

Banking and finance	..	189
Indigenous banking-189, Co-operative credit-191, Joint-stock banks-193, Small savings-194, Currency and coinage-196		

Trade and Commerce	..	196
Regulated markets-197, Fairs-200, Co-operation in trade-201, Consumer co-operative stores-202, State trading-202, Storage and warehousing-202, Weights and measures-203		

CHAPTER VII—COMMUNICATIONS .. 205—227

Roads and road transport	..	206
Roads-206, National highways-207, State highways-207, District minor roads-209, Canal inspection roads-210, Road transport-210, Passenger transport-210, Goods transport by road-218		

Railways	..	218
Rail road competition	..	219
Waterways, ferries and bridges	..	219
Civil aviation	..	221
Tourist facilities	..	223
Posts, telegraphs and telephones	..	224
Wireless station	..	227
CHAPTER VIII-MISCELLANEOUS OCCUPATIONS	..	229—242
Public services	..	229
Defence services	..	230
Educational personnel	..	231
Medical profession	..	232
Legal profession	..	232
Engineering services	..	234
Transporters	..	235
Personal services	..	236
Domestic services	..	238
Self-employed persons	..	239
CHAPTER IX-ECONOMIC TRENDS	..	243—267
Growth of agriculture	..	243
Growth of industry	..	247
Employment situation	..	253
Prices and wages	..	256
Community development	..	264
CHAPTER X-GENERAL ADMINISTRATION	..	269—280
Administrative divisions	..	269
District authorities	..	271
Development organisation	..	273
General arrangement for disposal of business	..	274
Elections	..	275
District Committees	..	275
Other State and Central Government Officers	..	276
Police	..	278
Judiciary	..	278
CHAPTER XI-REVENUE ADMINISTRATION	..	281—319
History of the revenue administration	..	281
Special assessment on land put to non-agricultural use	..	287

Collection of land revenue	..	289
Revenue administration and land records	..	292
Land revenue and special cesses	..	295
Land reforms	..	301
Other sources of revenue, State as well as Central	..	305
CHAPTER XII-LAW AND ORDER AND JUSTICE	..	321—345
Law and order	..	321
Incidence or crime-321		
Police	..	333
Jails and lock-ups	..	338
Justice	..	340
Civil courts-340, Criminal courts-342,		
Revenue courts-344, Bar associations-344		
CHAPTER XIII-OTHER DEPARTMENTS	..	347—366
Public Works Department	..	347
Haryana State Electricity Board	..	352
Co-operative Department	..	354
Department of Welfare of Scheduled Castes and Backward Classes	..	356
Finance Department	..	356
Public Relations Department	..	357
Fire Fighting Department	..	358
Food and Supplies Department	..	358
Planning Department	..	359
National Savings Organisation	..	359
Language Department	..	361
Central Soil Salinity Research Institute	..	362
Food Corporation of India	..	363
Department of Town and Country Planning, Urban Estates and Colonization	..	364
Rural Electrification	..	365

CHAPTER XIV—LOCAL GOVERNMENT	..	367—379
Historical background	..	367
Municipal committees: Karnal-368,		
Panipat-369, Kaithal-370, Thanesar-370,		
Shahabad (Shahbad)-370, Pehowa -371,		
Ladwa-371, Radaur-371, Pundri-372, Gharaunda-372, Nilu Kheri		
(Nilo Kheri) Notified Area Committee—372		
Town planning	..	372
Panchayati Raj	..	373
Panchayats-375, Panchayat Samitis-376, Zila Parishad-378		
CHAPTER XV-EDUCATION AND CULTURE	..	381-411
Historical background	..	381
Education of women	..	383
Educational set-up	..	384
Education (general)	..	385
Professional and technical education	..	397
Medical education-400, Teachers' training-400, Technical		
education-402		
Education of the handicapped	..	406
Gurukul education	..	406
National Fitness Corps	..	407
National Cadet Corps	..	408
Sports	..	408
Libraries and museums	..	409
Vijnan Mandir, Nilu Kheri (Nilo Kheri)	..	410
CHAPTER XVI—MEDICAL AND PUBLIC HEALTH SERVICES	..	413-436
Medical and health services	..	414
Diseases common to the district	..	420
Vital statistics	..	426
Preventive measures to promote public health	..	428
General	..	435

(vii)

CHAPTER XVII-OTHER SOCIAL SERVICES	.. 437—453
Labour welfare	.. 437
Labour legislation-438, Subsidized Industrial Housing Scheme-440,	..
Employees' Provident Funds Scheme-440, Employees' State	
Insurance Scheme-442	
Social welfare	.. 443
Advancement of backward classes	.. 445
Use of intoxicants	.. 451
CHAPTER XVIII—PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE ORGANISATIONS	.. 455—492
Representation of the district in the State and Union	
Legislatures	.. 455
First General Elections-455, Second General Elections-458, Third	
General Elections-459, Fourth General Elections-462, Mid-term	
Elections-465	
Political parties and organisations	.. 467
Newspapers and periodicals	.. 472
Voluntary social service organisations	.. 473
Organisations promoting welfare in general including recreation	
and sports-473, Organisations promoting constructive activities	
based on the Gandhiji's ideals of truth and non-violence-483,	
Organisations promoting economic welfare-485, Organisations	
promoting educational welfare-485, Organisations offering medical	
relief-486, Religious organisations promoting social objectives-487	
CHAPTER XIX—PLACES OF INTEREST	.. 493—526
Amin-493, Asandh-494, Gharaunda-494, Gula (Guhla) -495, Indri	
-495, Kaithal-495, Kala Am-499, Karnal-499, Kunjpura-503,	
Kurukshetra-503, Ladwa-512, Nilu Kheri (Nilu Kheri) -512,	
Panipat -513, Pehowa-516, Pharal-518, Pundri-518, Shahabad (Shahbad)	
-518, Siwan-520, Tirawari (Taraori)-520, Thanesar-521	
Places of archaeological interest	.. 524
Other legendary places	.. 526
APPENDIX	.. 529—642
Contents of Tabela 529, Tables I to LXIV-532-642	
BIBLIOGRAPHY	.. 643—645
GLOSSARY	.. 647—650
INDEX	.. 651—668

ILLUSTRATIONS

	Pages
A section of the pictorial scroll, depicting the features of Western Jumna (Yamuna) Canal from Karnal to Delhi and believed to have been prepared in the reign of Shah Jahan (1627-1657); the deer are being hunted by a tiger in the vicinity of Karnal	.. 669
Augmentation Canal, Karnal	.. 670
Energisation of Tubewells	.. 671
Mechanisation of agriculture—Harvesting through a combine	.. 672
Paddy growing in Karnal	.. 673
Bumper crop of an improved variety (Co. 975) of Sugarcane	.. 674
Karan Swiss 65, the Peak Milk Yielder (43 kg daily) of National Dairy Research Institute, Karnal	.. 675
Cattle fair at National Dairy Research Institute, Karnal	.. 676
An inner view of the Dairy Condensing Plant, Karnal	.. 677
A beautiful specimen of carpets manufactured at Panipat	.. 677
Co-operative Sugar Mills, Panipat	.. 678
A view of the Chakravarty Lake at Uchana, Karnal, with 'Whistling Teal' bar and restaurant and the nine-suite (double-bed rooms) tourist bungalow overlooking the lake—a haven for tourists	.. 679
Blue Jay, a tourist respite, Samalkha	.. 680
Bus Stand, Karnal	.. 680
Uchani Tower, the Symbol of 100 per cent rural electrification in Haryana	.. 681
Women Social Welfare Centre, Karnal	.. 682
A renovated section of the holy Kurukshetra Tank (Brahm Sar or Brahm Sarovar)	.. 683
Sannihit Tank, Thanesar	.. 684
Panchayat Bhawan, Karnal	.. 685
A part view of the Hali Park, Panipat	.. 686

MAPS (GENERAL AND ECONOMIC)

ERRATA

Chapter I

GENERAL

ORIGIN OF THE NAME OF THE DISTRICT

The district is named after the town of Karnal, which according to legends owes its foundation to Raja Karna¹, the mythical champion of Kauravas in the epic war of Mahabharata. The fact of its having been the camping station of Karna during the war is supported by the existence of a tank called Karna Talab and a town gate after his name.

LOCATION, BOUNDARIES, AREA AND POPULATION

Location.—The district² lies on the eastern edge of the Haryana between 29° 09' 50" and 30° 15' 15" north latitude, and 76° 10' 10" and 77° 17' 05" east longitude.

Boundaries.—The district is bounded on the east by river Yamuna which separates it from the Saharanpur, Muzaffarnagar and Meerut districts of the Uttar Pradesh; on the north by the Ambala district, and the Patiala district of the Punjab; on the west by the Jind district, and the Patiala district of the Punjab; and on the south by the Rohtak district.

Area.—At the time of the 1904-09 Settlement, the area of the district was

1. "Karna was the son of Pritha or Kunti by Surya, the sun, before her marriage to Pandu. Karna was thus half-brother of the Pandavas, but his relationship was not known to them till after his death. Kunti on one occasion paid such attention to the sage Durvasa, that he gave her a charm by virtue of which she might have a child by any god she preferred to invoke. She chose the sun, and the result was Karna, who was born equipped with arms and armour."

(John Dowson, *A Classical Dictionary of Hindu Mythology and Religion, Geography, History and Literature*, 1913, p. 150.)

2. The Karnal district has been bifurcated on January 23, 1973, and the new district of Kurukshetra comprising the tahsils of Thanesar, Gula (Guhla) and Kaithal, has been carved out of it. In this adjustment, 77 villages, formerly in the Kaithal tahsil, have been shifted to the adjoining areas, viz. 22 to the Karnal tahsil of the Karnal district; 44 to the Jind tahsil, 5 to the Saffidon tahsil and 6 to the Narwana tahsil of the Jind district.

3,124 square miles (8,091.1 square kilometres). Minor changes due to riverain action of the Yamuna continued to occur in the area of the district till 1949. Under the Provinces and States (Absorption of Enclaves) Order, 1950, 32 villages of this district were transferred to erstwhile Patiala and East Punjab States Union. In 1951, another 6 villages of *Khadar* area of the Karnal tahsil were transferred to Uttar Pradesh due to a major change in the course of the Yamuna. The area of 38 villages so transferred was 48 square miles (124.3 square kilometres). In 1960, 7 villages of the Gula (Guhla) sub-tahsil (now tahsil) comprising an area of about 11 square miles (28.5 square kilometres) were transferred to the Ambala district. Eight villages of Uttar Pradesh were added to this district due to river action, viz. 3 having an area of 14 square miles (36.3 square kilometres) were added to the Panipat tahsil in 1961 while 5 (4 in 1965 and 1 in 1969) comprising an area of 4 square miles (10.4 square kilometres) to the Karnal tahsil.

The area of the district at present (1972), as reported by the Deputy Commissioner, Karnal, is 3,101 square miles (8,031.6 square kilometres). However, the Central Statistical Organisation, Department of Statistics, Government of India, put the area of the district at 7,932 square kilometres. In size, the district ranks second among the seven districts of the State. Its maximum breadth from east to west is 68 miles (109.43 kilometres) while its maximum north-south extension is 84 miles (135.18 kilometres).

Population.—The total population of the district according to the 1951 Census was 10,79,379 persons, of which the rural population accounted for 8,76,067 and the urban for 2,03,312 persons.¹ The population according to 1961 Census was 14,90,430 persons (12,34,833 rural and 2,55,592 urban). It showed an increase of 38.34 per cent over the last decade.

HISTORY OF THE DISTRICT AS AN ADMINISTRATIVE UNIT

Karnal is a land of hoary antiquity and legendary traditions. It has been a battle-field of India from the time of Mahabharata.

The first record of the administrative division of the district is found in *Ain-i-Akbari*. Akbar divided his kingdom into subas which were sub-divided into sirkars, *dasturs* and parganas. The whole of what is now Karnal district was included in suba Delhi. Most of it was in sirkar Delhi but some portion of it also lay in sirkar Saharanpur, sirkar Hisar (Hissar) and sirkar Sirhind. Thus parts of the district, as we know it today, were originally included in the

1. This figure of total population for 1951 was adjusted to 10,77,381 persons at the 1961 Census according to the territorial jurisdiction of the district prevailing in 1961.

neighbouring administrative units and it was only gradually that the district emerged in its present form.

To get a clearer idea, we may further study the district as consisting of two portions with a distinct administrative history up to 1862. When the British took over the area after the Treaty of Surji Arjungaon in 1803, the portion comprising the present Panipat tahsil and a part of the Karnal tahsil became a part of the Delhi territory. This area was expressly excluded from the purview of the Bengal Regulations. In 1819, the Delhi territory was reorganised into four parts which were the beginnings of the districts of Delhi, Rohtak, Gurgaon and Hisar (Hissar). The Panipat district, including the area of Panipat, Karnal and Sonapat, was formed as the fifth district in the reorganisation of 1824. In 1832, these five districts were included in the North-Western Provinces.

In 1851, the Panipat district was divided into Panipat and Karnal tahsils with tahsil headquarters at Panipat and Gharaunda¹ respectively. About three years later, the headquarters of the district were shifted to Karnal. In 1858, the Karnal district, along with the other portion of the Delhi territory, lying north of the Yamuna, was transferred from the North-Western Provinces to the Punjab. This is the background of one part of the administrative history of the district.

The other portion of the district was parcelled out among various Sikh chiefs and confederacies who had risen to power on the decline of the Mughal empire and had established independent principalities. Kaithal lapsed to the British Government in 1849, a part of Thanesar (held by Bhag Singh) in 1832 and the rest of it (held by Bhanga Singh) in 1850, and Ladwa in 1846. The British Government organised these lapsed territories into the Thanesar district in 1849. This district was broken up in 1862 and the area distributed between the districts of Karnal and Ambala. The parganas of Gula (Guhla), Pehowa, Kaithal, Indri and a part of Thanesar were included in the Karnal district and the remainder was allotted to Ambala. In 1866, Pehowa pargana was transferred from Karnal to the Ambala district. It was transferred back to the Karnal district (14 villages in 1875 and the remaining 89 in 1888) and included in the Kaithal tahsil. The Pipli tahsil, which had been transferred to the Ambala district in 1862, came back to the district in 1897, and the headquarters of the tahsil were shifted to Thanesar the same year. A sub-tahsil at Gula (Guhla) was created in 1890 and the Kaithal tahsil was formed into a sub-division under the charge of a Sub-Divisional Officer in 1896.

1. The tahsil was moved from Gharaunda to Karnal in 1868.

The subsequent changes in the composition of the district, which occurred during the following seven decades, though of a minor nature, are described below :

1901 to 1911.—The district lost one village to the Muzaffarnagar district (Uttar Pradesh) and gained one village from the Saharanpur district (Uttar Pradesh).

1911 to 1921.—Some small transfers took place between this district and Uttar Pradesh due to river action, but no village as a whole was lost or gained.

1921 to 1931.—No change took place during this decade.

1931 to 1941.—The deep stream of the Yamuna was declared to be the boundary between the Karnal district on the one side and the Muzaffarnagar and Meerut districts of Uttar Pradesh on the other *vide* Government of India, Home Department, notification No. F.350/33, dated December 14, 1933. The boundary between the Karnal district and the Saharanpur district of Uttar Pradesh was, however, to be the village boundaries. There were some very minor changes between this district and Uttar Pradesh.

1941 to 1951.—Under the Provinces and States (Absorption and Enclaves) Order, 1950, the district lost 32 villages to erstwhile PEPSU. In 1951, another 6 villages of *Khadar* area of the Karnal tahsil were transferred to Uttar Pradesh due to river action.

1951 to 1961.—In 1960, seven villages of the Gula (Guhla) tashil (then a sub-tashil of the Kaithal tahsil) were excluded from the district and added to the Ambala district.

1961 to 1969.—The district gained 8 villages of Uttar Pradesh due to river action, *viz.* 3 in 1961 were added to the Panipat tahsil while 4 in 1965 and 1 in 1969 to the Karnal tahsil.

Gula (Guhla), a sub-tashil of the Kaithal tahsil, was raised to the status of a tahsil on August 13, 1968.

SUB-DIVISIONS, TAHSILS AND THANAS

The district comprises five tahsils namely, Karnal, Panipat, Thanesar, Kaithal and Gula (Guhla). The sub-divisions have been created at Karnal, Kaithal, Panipat and Thanesar. Gula (Guhla) tahsil is under the Sub-Divisional Officer, Kaithal. Kaithal sub-division was formed in 1896 while

the remaining three sub-divisions were created in the post-Independence period, viz. Panipat in 1955, Thanesar in 1960 and Karnal in 1964.

There are 22 thanas and 8 police posts for police administration. Their details may be seen in the Chapter on 'General Administration'.

TOPOGRAPHY

The entire district is a part of the Punjab plain and appears monotonously flat to a layman, but intensive studies on a large scale reveal significant variations in the configuration of surface. On the basis of these variations it is possible to divide the district into several localities which are distinct from one another in their relief features.

The district may be divided into two regions demarcated by a watershed running north-south at a distance varying between 6 and 12 miles (10 and 20 kilometres) from the Yamuna, hardly perceptible to the eye, which determines the drainage of the area. The inland Chautang stream and the Saraswati which drains into the Ghagghar river lie to the west of this watershed. The waters of the area to the east of the watershed drain into the Yamuna. Their flow passes near Karnal and then follows the line of the eastern canal distributary. To the east of this watershed the land is inclined towards the Yamuna; to the west the inclination is both westward and southward. The westward fall in altitude is from about 850 feet (259 metres) in the northern parts of the watershed to about 760 feet (232 metres) along the western boundary of the district, showing an average fall of about 2 feet per mile (0.38 metre per kilometre). The southward decrease in altitude going below 750 feet (229 metres) also gives a 2 feet-a-mile fall in slope. The area west of the watershed is divisible into two distinct physiographic parts, thus splitting the district into three portions: the *Khadar*, the upland plain, and the low-lying areas.

The Khadar.—The excursions of the Yamuna extend within one mile (1.6 kilometres) of the watershed and this area is known as the *Khadar*. It is a low-lying riverain tract extending up to the broad sandy bed of the river with light soils and water close to the surface. The Yamuna has swept over the whole of it with incomparatively recent times. The *Khadar* is a flood plain formed by the Yamuna along its course. After the rainy season the receding floods leave a lot of fine silt which is easy to cultivate and which remains wet for most part of the year. For this reason the soils of this tract seldom suffer from really dry conditions. In fact, quite often too much water in the soil is the main problem. These conditions are most suitable for rice and sugarcane cultivation. In parts, vegetables are also grown.

Because of the vulnerability of this tract to flooding, the villages, generally small and sparsely spread, are situated on higher ground. The *Khadar* is generally about 20 feet (6 metres) lower than the upland plain, and within the *Khadar* tract the altitude gradually decreases to the south, the average fall being 2 feet per mile (0.38 metre per kilometre). Because the land is easy to cultivate and water is abundant, there is still considerable scope for extension of cultivation in this tract. The vegetation cover consists mainly of grass and scrub with only scattered trees here and there.

The Upland Plain.—The upland plain is not a uniformly level area. Instead, it is inclined to the south and south-west. East-west sections drawn on the topographical sheets indicate that immediately west of the *Khadar* is a sort of hump in the configuration of surface of the district covering Thanesar *Bangar*, Indri *Bangar*, Karnal *Bangar* and Panipat *Bangar* assessment circles. The *Bangar* zone is 5 to 10 miles (8 to 16 kilometres) in width. Within this zone the land is relatively flat. It is to the west of this zone that inclination to the south and south-west starts. *Bangar* is irrigated by wells and canals and is a prosperous agricultural area.

West of the *Bangar* tract is the *Nardak* where water-table has been deep till recently. It was an open plain covered with various grasses and *dhak* trees until a large part of this area was reclaimed and brought under the plough. About two-thirds of the district is covered by *Bangar* and *Nardak*. This is made of old alluvium.

The Low-Lying Areas.—It includes the areas of Markanda *Bet* and Naili circle. The conditions of soil and surface here are very much like those of the Yamuna *Khadar*. The *Bet* along the Markanda stream is a low-lying flood plain. It has clayey loam soil. In dry season this soil is hard and cracking, whereas during the rainy season it is wet and sticky. Till irrigation was introduced in recent years, the land had been lying waste. Then a quick process of reclamation began. Naili circle is a low-lying area along the Saraswati stream. It suffers from poor drainage during the rainy months. In this area rice has emerged as a main cash crop. The new settlers in the area have brought significant changes in the use of the land.

NATURAL DRAINAGE

Much of the natural drainage of the northern parts of the Karnal district sloping towards the south-west is determined by streams emerging from the foot of the lower Shiwalik hills which bring down heavy floods during the

monsoon months. This has necessitated vast schemes of drainage system.¹ Waters of the entire northern part of the district collect in the Naili circle during the rainy season through several seasonal streams like Umla, a tributary of the Ghagghar, the Markanda, the Choya, the Linda and the Chautang flooding the low-lying areas.

RIVER SYSTEM

The district is bordered on the east by the Yamuna and on the north-west by the Ghagghar. The Yamuna receives drainage from a narrow zone on its western side whereas the Ghagghar receives drainage of a large part of the Thanesar tahsil and the northern part of the Kaithal tahsil. In between the two rivers, there is a third but small stream, the Chautang (inland), which runs independently only to lose itself near Asandh.

The Yamuna.—The Yamuna pierces the Shiwaliks 95 miles (153 kilometres) from its source at Khara, and separates the Ambala and Karnal districts in Haryana from Saharanpur and Muzaffarnagar in the Uttar Pradesh. The river enters the Karnal district 2 kilometres north of village Nakom and $1\frac{1}{2}$ kilometres east of village Ramgarh. It leaves the district about $\frac{1}{2}$ kilometre south-west from village Kakor Khurd and 2 kilometres east of village Garhi Jat. Its length in the Karnal district is 142 kilometres (approximately) and average breadth (distance between two high banks) 146 metres (approximately).

River Yamuna has a great history mostly shrouded in mystery. The name Yamuna is mentioned in connection with Dasarjana, the battle of the Ten Kings mentioned in the *Rigveda*. According to some scholars, the Yamuna in early times used to flow into the course of the Saraswati² and like the Satluj, was a tributary, of the Ghagghar which was an independent river system running in the Hakra Bed and draining into the Rann of Kutch. For reasons yet to be fully investigated, the Yamuna-Satluj Plain is said to have experienced an uplift which dismembered the then river system, the Satluj shifting to the west and the Yamuna to the east, leaving the Ghagghar a truncated independent stream with utterly inadequate water-supply for maintaining its flow up to the Rann of Kutch.

The Yamuna gradually drifted eastward to the present line of flow. Not long ago it used to flow in the bed of the Burhi Nadi which at present runs

1. Refer to Chapter on 'Agriculture and Irrigation' for a detailed description of the drainage schemes executed as measures of flood protection.

2. There are both physical and historical grounds for this belief. (R. C. Majumdar, *The History and Culture of the Indian People*, Volume I, *The Vedic Age*, 1965, p. 87.)

along the western margin of the *Khadar*. The presence of ox-bow lakes in the *Khadar* is indicative of this eastward drift of the river, and the available records also support the view that about four hundred years ago, Karnal and Panipat were situated on the bank of this river. Burhi Nadi has been known in the recent past to flow regularly in flood times, the floods passing from the river above village Dhansauli (tahsil Panipat) and running down the old bed as far as Delhi in some parts, the last occasion being in 1864. Later, the river suddenly changed its course in some parts while in others it gradually retreated. Now the Yamuna seems to have stabilised its course and there have been no significant changes in it during recent decades.

The Ghagghar.—The river which only touches the north-western border of the Karnal district receives drainage of a large part of it. It enters the Karnal district $1\frac{1}{2}$ kilometres north-east of village Phaphrala and $\frac{1}{2}$ kilometre south-west of village Jawalapur. It leaves the district one kilometre south-east of village Ratanheri and 2 kilometres west of village Ratta Khera Luqman. It again enters the district one kilometre north of village Uplana and one kilometre south-west of village Arnetu and leaves the district $2\frac{1}{2}$ kilometres north of village Chicharwala and 2 kilometres south-west of village Uplana. The length of river Ghagghar in the district is 38 kilometres (approximately) and average breadth 50 metres (approximately).

The Ghagghar is said to have been a mighty river system in the past. Although in itself a small stream coming down the lower sections of the hills, its two major tributaries, the Satluj on the west and the Yamuna on the east, were perennial streams fed by snow-clad ranges of the Himalayas. It is said that at one time an advanced civilization had developed along its lower course, mainly because of abundant water-supply available from the river for irrigation. With the dismemberment of the river, this civilization also declined. The present bed of the river is much too wide for the small volume of water seen in it during the year. With this volume of water the river could never have carved out such a wide valley, and also could not maintain its flow through the arid areas of the subcontinent reaching the Rann of Kutch. Precisely what caused the desiccation and when, is a question which deserves a thorough scientific investigation. However, the two important streams now draining the northern part of the Karnal district and flowing into the Ghagghar are the Markanda and the Saraswati.

The Markanda.—It is a seasonal stream and takes its origin in the lower Shiwalik hills. When in spate during the rainy season, it poses a serious threat to villages situated along its banks and causes considerable damage to the standing crops. It enters the district near Damli village (tahsil Thanesar) and passes

near Shahabad (Shahbad). After flowing in the south-westerly direction for about 48 kilometres it joins Ghagghar river.

The Saraswati.—The Saraswati enters the Karnal district one kilometre south of village Mustafabad R.S. and $\frac{1}{2}$ kilometre north-east of village Gondhni. It leaves the district $\frac{1}{2}$ kilometre north-east of village Baharjachh and $\frac{1}{2}$ kilometre west of village Andhali. Its length in the district is 160 kilometres approximately and its breadth varies from 15 to 40 metres.

River Saraswati has been referred to as the river par excellence and occurs most frequently in the *Rigveda*. It seems to have been the holy stream of the Vedic age. It is possible that it was as large as the Satluj in the Vedic age, and actually reached the sea, as the *Rigveda* describes it as going down to the ocean. It was the first of the Vedic rivers and its banks witnessed the development of the Vedic sacrifices. It is believed that before the dismemberment of the Ghagghar river system, the Yamuna used to flow into the bed of the Saraswati. At present the Saraswati is an insignificant stream beginning in a large depression at Kutawar in the north of Mustafabad (Ambala district) and carrying waters of the Kundla and the Chautang. Through most of its course it has no defined bed. The Saraswati and its numerous small tributaries drain a large part of the Thanesar tahsil and overspill their waters in the low-lying Nail circle though their floods rarely extend to any distance. It outfalls into Bibipur lake, wherefrom through Saraswati drain it joins Para, a tributary of the Ghagghar.

The Chautang.—Apart from a small Chautang Nadi which rises in the Shiwalik hills, enters the Karnal district and joins the Saraswati at Bhaini (Thanesar tahsil), there is an independent inland but seasonal Chautang Nallah. It starts a few kilometres north of Chhachhrauli (Ambala district) and flows on to the south-west and loses itself near Asandh.

GEOLOGY

The Karnal district offers nothing of geological interest. It is entirely covered by alluvial deposits of quaternary to recent age, which consist of clay and sand with *kankar* (calcareous concentrations). Beds of gravel and cemented sand are occasionally present with the unconsolidated sand. The thickness of the alluvium is not known even approximately, but it is reasonably certain that it is a few hundred metres thick throughout.

Economic minerals.—The district is well known for the several occurrences of saltpetre which is of economic importance. The ordinary potter's clay which is a common feature in the alluvial plains is used for the manufacture of earthen wares and bricks.

The depth of water in general has been found to vary from 6 to 7 metres below land surface. The water-table elevation declines from north-east to south-east and is a roughly sub-parallel to the regional slope of the country. The ground water in Shahabad (Shahbad), Pipli and Ladwa areas occurs in a thick zone of saturation from or within a few metres of land surface to a depth as yet unknown. The water in general is low in chloride but high in bicarbonate and total hardness. The water is potable and is considered suitable for irrigation. Its total hardness being high, the water is considered unsuitable for laundering purposes because of comparatively high consumption of soap. Otherwise with only a few exceptions, it can be used for all normal purposes.

FLORA

The flora of the Karnal district is very little known. As in the adjoining district, Karnal also has a rich alluvial soil and consequently the vegetation is fairly rich both in density and in the number of species. Due to extensive cultivation very little of the natural forests is left over. These forests, wherever present, are of the open dry deciduous scrub consisting of the following shrubs and trees :—*Butes monosperma* (Dhak), *Balanites aegyptiaca* (Hingot), *Salvadora Oleoides* (Jal), *Diospyros cordifolia* (Kaindu), *Prosopis cineraria* (Jand), *Zizyphus nummularia* (Jhar), *Z. jujuba*, *Z. oenoplia*, *Kirganelia reticulata*, *Clerodendrum phlomidis* (Arni), *Alhagi pseudalhagi* (Jawasa), *Acacia nilotica* (Kikar, Babul), *A. leucophloea*, *A. modesta*, *Capparis decidua* (Kair), *Adhatoda vasica* and species of *Indigofera* (Neel), *Euphorbia*, *Ipomaea* (Kaladana), *Opuntia* (Nagphani), etc. Associated with these trees and shrubs are found shrubby climbers such as *Pergularia daemia* (Karial, Siali, Trotu), *Capparis sepiaria* (Hins), *Oxystelma esculentum* (Dhutlata, Gani), *Cocculus pendulus* (Vallur, Parwatti), *Maerua ovalifolia*, *Coccinia cordifolia* (Kanhuri, Jangli parval), etc. During the monsoon a number of herbaceous plants appear as undergrowth in the jungles. These include *Commelina benghalensis* (Kanna, Kanshura), *Digera muricata*, *Tephrosia hamiltonii*, *Tribulus terrestris* (Gokhru, lotak), *Trianthema portulacastrum* (Bishkapra), *Achyranthes aspera* (Latjora, Chichra), etc. *Acacia nilotica* (Kikar) and *Phoenix sylvestris* (Khajur) are very common in swampy or marshy localities and in low lying areas. *Tamarix articulata* (Farash) is common in saline areas where hardly any other tree can grow. *Salsola foetida* (Lana) and *Suaeda fruticosa* (Moti lana) are the common herbs in saline areas. *Dalbergia sissoo* (Shisam) is extensively planted along canal banks and road-sides. Some of the other planted species along canal banks and road-sides include *Millingtonia hortensis* (Akas Nim), *Ailanthus excelsa*

(*Aruna*, *Maharukha*), *Prosopis juliflora* (*Jand Kanda*), *Inga dulcis* (*Vilayati Imli*), *Acacia leucophloea* (*Nimbar*), *Albizia lebbeck* (*Sirish*), *Azadirachta indica* (*Nim*), *Cassia fistula* (*Amaltas*), *Morus alba* (*Tut*) and species of *Eucalyptus*, etc. *Ficus religiosa* (*Peepal*) and *Ficus henghalensis* (*Badh*) are often planted near villages and the people look upon these trees with religious fervour. *Ziziphus mauritiana* (*Baer*), *Mangifera indica* (*Am*) and *Syzgium jambolanum* (*Jamun*) are the chief fruit trees. Other common trees which are either planted or self sown include *Salmalia malabarica* (*Seemul*), *Moringa oleifera* (*Sainjna*), *Delonix regia* (*Poinciana regia*, *Golmur*), *Putranjiva roxburghii*, *Terminalia arjuna* (*Arjun*), *Cordia dichotoma* (*C. myxa*, *Lasora*), *Bauhinia variegata* (*Kachnar*), etc. Irrigated forest plantations have been taken up recently in the district to meet the demand for fuel wood and timber for furniture, sports goods industry, paper pulp, electric poles, etc. The main plantation block is the Saraswati Plantation near Pehowa in Gula (*Guhla*) tahsil, raised with species of *Eucalyptus*, *Dalbergia sissoo*, *Acacia nilotica*, and *Morus alba*. In waste lands are found *Calotropis procera* (*Ak*), *Xanthium strumarium* (*Chota dhatura*), *Datura metel* (*Dhatura*), *Argemone mexicana* (*Satyanashi*), etc.

There are several medicinal plants of local repute in the district which include *Boerhaavia diffusa* (*Punarnva*), *Sida cordifolia* (*Bala*), *Withania somnifera* (*Aswagandh*), *Vitex negundo* (*Nigundi*, *Simbhalu*), *Physalis minima* (*Tulati-pati*, *Kaknaji*), *Artemisia scoparia* (*Pilajan*, *Danti*), *Crotalaria medicaginea* (*Gulabi*), *Chenopodium ambrosioides*, *Malothria maderaspatana* (*Gwala Kakri*), *Oxystelma esculentum* (*Dhutlata*, *gani*), *Phyllanthus niruri* (*Jara amla*), *Tribulus terrestris* (*Gokru*, *lotak*), *Adhatoda vasica* (*Adulasa*), etc.

The aquatic flowering plants are poorly represented. In ponds, lakes and canals are found *Vallisneria spiralis* (*Sawala*, *syala*), *Hydrilla verticillata* (*Janjh*, *jala*), *Potamogeton* sp., *Ceratophyllum demersum*, *Utricularia* sp., etc. *Azolla pinnata* is a floating aquatic fern which sometimes covers ponds and pools. *Marsilea*, another aquatic fern, is generally found on water margins.

In the cultivated fields *Aeschynomene indica*, *Convolvulus arvensis*, *Crotalaria medicaginea* (*Gulabi*), *Euphorbia hirta* (*Dhuti*), *Euphorbia dracunculoides* (*Kangi*) and *Asphodelus tenuifolius* (*Piazi*) among others are found as weeds.

Orobanche indica (*Sarsum banda*) is a common root parasite on mustard plants and it does considerable harm to the crop. *Cistanche*

tubulosa is also a root parasite commonly found on *Calotropis procera* during February-March. Other parasitic angiosperms include *Cuscuta reflexa* (Nilathari, Zarbuti), and *Cuscuta hyalina*.

Saccharum spontaneum (Sarkara) *Erianthus munja* (Munj) and *Desmostachya bipinnata* (Dab) are three important grasses of the area. The leaves of these are used for thatching huts. Baskets, chairs, screens, etc., are made from the stem of *sarkara*. *Munj* fibre is strong and is used in making ropes, strings and mattings. The fibre of *dab* is inferior to that of *munj*. *Vetiveria zizanioides* (Khus-Khus) and *Typha elephantina* are often found in water-logged areas and along canal banks. *Trapa bispinosa* (Singhara) is cultivated in water ponds. The common fodder grasses include *Cynodon dactylon* (Dublu), *Cymbopogon jwarancusa* (Anjan), *Dichanthium annulatum* (Palwa), *Heteropogon contortus* (Sarala), *Echinochloa colonum* (Sanwak), *Cenchrus* species and species of *Sporobolus*. Other grasses found are species of *Dactyloctenium*, *Aristida*, etc.

FAUNA

There was a time when dense jungles of Karnal harboured various kinds of wild birds and animals. But with the growth of communications, clearance of jungles, increase in irrigation facilities and extension of cultivation, the rich stocks have considerably dwindled; nonetheless the district still holds a good position as regards the stock of wild-life. In the Kaithal tahsil and the area bordering Jind territory, black buck, *nilgai* and chinkara are still available, though not in plenty. Hog deer which was once quite abundant in swampy parts and along the banks of the Yamuna, is now available in traces only. Grey partridges are sufficiently available throughout except in *Khadar*. Black partridges are found along the banks of canal irrigated and riverain areas. Hare are commonly available. Peafowl is abundantly available in the cultivated fields in grooves and orchards. Blue rock pigeons are also commonly noticed. Common quail comes with the ripening of wheat crop, as usual. The *jheels* abound in ducks and geese. The pintail, mallard, pochard shoveller, teals, comb duck, spotbil and goose are the common species of ducks available. The grey leg goose is to be found on the large marshes and the black barred-goose is to be seen on river-side. The common and jack snipe are also available in rice fields. The pelicans, cranes, herons, bitterns and many sorts of waders cover *jheels*; *saras* and *kunj* are particularly conspicuous.

In old times, lions and tigers were not uncommon in this district. The *Nardak* area was once a favourite spot of the Mughal emperors for hunting

lions and tigers. Francois Bernier states that lions which were scarce in India except in Kathiawar were still found in this area and that lion hunting as a sport was the privilege of the Emperors.¹ As late as 1827, Archer² says that lions were sometimes seen within a 20-mile (32-kilometre) radius of Karnal while tigers were exceedingly numerous in its immediate vicinity³. These have completely disappeared now. Jackals, of course, abound and are responsible for much damage in the fields.

Three sanctuaries providing complete protection and rest to partridge, peafowl, hog deer, wild boar, blue bull and black buck have been established at Teh Muijibullah, Bir Baraswan and Bir Kohli Khera to ensure adequate reproduction.

CLIMATE

The climate of the district is characterised by extreme dryness of the air with an intensely hot summer and a cold winter. It is only during the three monsoon months of July, August and September that the moist air of oceanic origin penetrates into the district. The year may be divided into four seasons. The cold season is from mid-November to about mid-March. It is followed by hot season which continues to about the end of June. The period from July to about mid-September is the south-west monsoon season, after which a period of one month constitutes the transition period from the monsoon to winter conditions.

Rainfall.—Records of rainfall in the district are available for six stations for periods ranging from 77 to 99 years. The details of the rainfall at these stations and for the district as a whole are given in Table I of Appendix. The average annual rainfall in the district is 568.7 mm and generally increases from south-west to north-east. About 81 per cent of the normal annual rainfall in the district is received during June to September, July being the rainiest month. Some rain is also received during the cold season in association with passing western disturbances.

The variation in the annual rainfall from year to year is large. In the fifty year period from 1901 to 1950, the highest annual rainfall amounting

1. Francois Bernier, *Travels in the Mogul Empire*, 1891, pp. 378-79.

2. Archer's *Tours in Upper India and in parts of the Himalayan Mountains*, 1833.

3. In a pictorial scroll, depicting the features of Western Jumna (Yamuna) Canal from Karnal to Delhi and believed to have been prepared in the reign of Shah Jahan (1627-1657), the deer are being hunted by a tiger in the vicinity of Karnal. See illustration.

to 171 per cent of the normal occurred in 1942 while the lowest rainfall which was only 46 per cent of the normal, occurred in 1938. In the same period, the annual rainfall in the district was less than 80 per cent of the normal in 10 years. Consecutive two and three years of rainfall less than 80 per cent of the normal have occurred once each. Two consecutive years of such low rainfall occurred 5 times at Rajaund during these 50 years. Even 4 consecutive years of such low rainfall occurred once each at Karnal, Gula (Guhla) and Thanesar. It will be seen from Table II of Appendix that the annual rainfall in the district was between 400 and 700 mm in 36 years out of 50.

On an average there are 30 rainy days (days with rainfall of 2.5 mm or more) in a year. This number varies from 18 at Rajaund to 35 at Karnal.

The heaviest recorded rainfall in 24 hours was 269.70 mm at Karnal on August 21, 1952.

Temperature.—There is a meteorological observatory at Karnal. For the purpose of the following description, records of this observatory as well as the data of the neighbouring stations outside the district may be taken as representative of the meteorological conditions in the district in general. The cold season generally starts by about mid-November when temperatures begin to decrease rapidly. January is generally the coldest month with the mean daily maximum temperature at 20.2°C and the mean daily minimum at 7.0°C. In association with eastward passage of western disturbances in the cold season, cold waves affect the district and the minimum temperature sometimes goes down to about a degree or so below the freezing point of water. From about the middle of March temperatures begin to rise rapidly. May and June are the hottest months with the mean daily maximum temperature at about 40°C. From about April, hot westerly winds, locally known as *luh* begin to blow and the weather progressively becomes hot and trying. In May and June the maximum temperature may sometimes go above 45°C. With the advance of the south-west monsoon into the district towards the end of June, there is an appreciable drop in the day temperatures while night temperatures continue to be nearly as high as in the summer. Even during the brief south-west monsoon season, the weather is sultry and unpleasant due to the increased moisture in the monsoon air. After the withdrawal of the monsoon by about mid-September there is an increase in the day temperatures but night temperature drops down rapidly with the progress of the season.

The highest maximum temperature recorded at Karnal was 46.0°C on

May 28, 1962. The lowest minimum was 0.0°C on January 31, 1964.

Humidity.—The air is generally dry during the greater part of the year. Humidity is generally high, ranging between 60 and 85 per cent during the monsoon season and decreases thereafter. April and May are usually the driest months with relative humidities being about 20 per cent or less in the afternoons.

Cloudiness.— During the south-west monsoon season and particularly during July and August the skies are heavily clouded. In the rest of the year the skies are clear or lightly clouded generally. During January to early March, however, the skies are often cloudy and overcast in association with the passage of western disturbances.

Winds.—In general, winds are light except during the summer season when they strengthen in force. During the monsoon season, winds are mostly easterly or south-easterly. In the rest of the year winds are predominantly westerly or north-westerly.

Special weather phenomena.—April to September is the period with the highest incidence of thunder-storms. Dust-storms mostly occur during April to June. Violent squalls may accompany such storms. Some of the thunder-storms are accompanied with heavy rain and occasional hail. Thunder-storms also occur in winter months in association with passing western disturbances. Fog, sometimes dense, occurs in the cold season.

Tables III, IV and V of Appendix give the temperature and relative humidity, mean wind speed and special weather phenomena respectively for Karnal.



सत्यमेव जयते

Chapter II

HISTORY

THE ANCIENT PERIOD

The history of the area in which the Karnal district lies, can be traced back, howsoever dimly at times, to the ancient Aryan past. Of the five traditional divisions of India, the region comprising Karnal district lay mostly in the Madhyadesha.¹ From time immemorial, this region has been regarded as extremely sacred. It was on the banks of the Saraswati the Drishadwati and the Apaya rivers in this region that the *Rigvedic* Aryans kindled the sacred fire and chanted the Vedic hymns. The Saraswati² can, with little hesitation, be identified with the modern Sarsuti or Saraswati, a stream midway between the Satluj and the Yamuna. In the period of the *Rigveda*, the river was of greater importance than it was in the following period when it was known to have buried itself in the sands in its flow to the Indus.

This region was the home of the Bharatas, a famous *Rigvedic* tribe of the Aryans. In the later Vedic period, it appears that the Bharatas and the Purus were merged into the Kurus who commanded the strategic plain between

1. It comprised the central part of Northern India lying between the Himalayas and the Vindhyas and between Allahabad or Varanasi in the east and some locality like Prithudaka (Pehowa in Karnal district) in the eastern Punjab (Haryana) in the west. (R.C. Majumdar, *The History and Culture of the Indian People*, Volume II, *The Age of Imperial Unity*, 1960, p. 101 fn.)

2. The difficulty in precise identification of the Saraswati and Drishadwati is due to the extensive changes in the course of the rivers of Northern India which are known to have occurred. Modern maps are utterly misleading, and it is impossible to construct maps of the ancient river system for any time preceding the Muslim invasion. "It is, however, a reasonable conjecture that within the period of history the Sutlej (Satluj) united with the Sarasvati (Saraswati) and Ghaggar (Ghagghar) to form the great river (Hakra) which once flowed into the Indus through Bahawalpur, and that then Brahmavarta was a Doab (space between rivers) which might be compared with that of the Ganges (Ganga) and Jumna (Yamuna)." (*Alexander, Porus, and the Panjab* by C. Pearson, appearing in *The Indian Antiquary*, Volume XXXIV, 1905, p. 254.)

3. E. J. Rapson, *The Cambridge History of India*, Volume I, *Ancient India*, 1955, p. 72.

the Saraswati and the Yamuna near the north-eastern edge of the desert of Rajputana, giving it their name Kurukshetra or the land of the Kurus.¹

This area, which according to the Mahabharata was divided into a number of *vanas* or forests, had urban settlements like Kaithal, Rajaund and Panipat. Kaithal is said to have been founded by the mythical hero Yudhishtira, its sanskrit name being 'Kapisthala' abode of monkeys. Rajaund has been derived from 'Rajahand' the prison of rajahs. Panipat is said to have been one of the *prasthas* which Yudhishtira demanded from Duryodhana as the price of peace. The region of Kurukshetra was the scene of the Mahabharata War between the Kauravas and the Pandavas. The scenes of many incidents connected with the war are traditionally pointed out by the people, and the whole area is full of *tirthas* considered sacred.

The district lay beyond the reach of the Macedonian conqueror and is indiscernible in the faint light of the history of that period. In the Mauryan times it formed part of the Magadhan empire as the discovery of Asoka's stupa at Thanesar indicates. After the dismemberment of the Mauryan empire, the Indo Bactrian Greeks invaded and occupied the Punjab in the 2nd century B.C.

In the first two centuries of the Christian era, the tract was included in the Kushana empire as is indicated by the discovery of Indo-Scythian coins from Theh Polar, an ancient mound about 11 miles (18 kilometres) from Kaithal² and two inscribed red-stone rectangular pillars of Kushana times from Amin, a village in the Karnal tahsil. In the 3rd century, Kushana power declined and the Yaudheyas, representing an ancient Indo-Iranian clan, rose to power and held sway over the region between the Satluj and the Yamuna. Their coins and other relics have been found all over Haryana including Theh Polar, Panipat and Karnal.

In the first half of the 4th century the Karnal area along with Hariyana³ seems to have been annexed by the Gupta monarchs. The empire was shattered by the attack of the Huns in about 510 A.D., and probably during this period and up to the end of the 6th century there was no settled

1. R. S. Tripathi, *History of Ancient India*, 1960, p. 42; Buddha Prakash, *Political and Social Movements in Ancient Panjab*, 1964, p. 80.

2. The information about the distance of Theh Polar from Kaithal given in *Census of India*, 1961, *Punjab District Census Handbook No. 4, Karnal District* (Published in 1966), is not correct.

3. It is different from present Haryana State. It comprised the whole tract of land bounded by Shiwaliks in the north, the Rajasthan desert and the Aravallis in the south, the Ganga basin in the east and the Satluj basin in the west.

rule in these parts. At the end of the 6th century A.D., Thanesar became the capital of Raja Prabhakara-var dhana of Thanesar, who tightened his grip over the Indus region. Actually, Yasodharman Vishnu-var dhana of Mandasor had driven the Huns to the north-west before his time.

Under Prabhakara-var dhana and his younger son, Harsha, Thanesar attained a paramount place among the powers of Northern India. Under Var dhana rulers the region around Thanesar was known as Srikantha. The remains of stone temples and palaces found in some old villages along the banks of the Saraswati and the Ghagghar are a living evidence of the times in which Harsha ruled over a large kingdom. The account of Yuan Chwang (Hiuen Tsang), the Chinese pilgrim, who remained in India from A.D. 629 to 645 throws much valuable light on the history of this period. The court poet, Bana, also provides very useful information about the economic, social and cultural life of the area in his book *Harsha-charita*.¹ Recently, a seal of Harsha of Thanesar has been found in the village Daulatpur near Pipli.

The 7th century was a period of eclecticism in religion. Buddhism was a declining force, Hinduism was again coming into its own, and religious traditions played a considerable part in raising Thanesar to a foremost position in Northern India.²

The glory of Thanesar was dimmed to some extent with the transfer of the seat of Government to Kanauj in the very life time of Harsha-var dhana. It is known from the Khalimpur copper-plate of Dharmapala, the pala emperor of Bengal, (c. A.D. 770—810) that he held a *darbar* at Kanauj and installed Chakrayudha, his nominee on the throne of Kanauj. The *darbar* was attended by a number of vassal chiefs including the ruler of Kuru country. It may be deduced from this contemporary record that the influence, if not the power, of Dharmapala extended as far as Haryana.

The authority of Mihira Bhoja (c.A.D. 836—85), the Pratihara ruler of Kanauj penetrated as far as Pehowa and even beyond it in the Punjab. The Pehowa inscription records certain transactions at the local fair by certain horse dealers 'in the victorious reign of Bhojadeva'.³ Another Pehowa inscription throws considerable light on the history of the region in the time

1. Buddha Prakash, *Glimpses of Hariyana*, 1967, p. 16.

2. *Karnal District Gazetteer*, 1918, pp. 13-14.

3. *Epigraphia Indica And Record of the Archaeological of Survey of India*, Part IV, 1889 (Calcutta), pp. 184-90.

of the Pratihara emperor, Mahendrapala (c. A.D. 885—910). It seems that he lost some territory in the Punjab to Sankaravarman, king of Kashmir. In spite of the loss, if any, it is certain from this inscription that the district of Karnal continued to remain under him.¹ At that time the Tomara Rajputs, descending from Raja Jaula, established themselves as rulers of this region in the middle of the 9th century. About this time, they must have acknowledged the suzerainty of the Pratihara emperor Bhoja. The Tomara Gogga and his two step brothers Purnaraja and Devaraja took service under the Pratiharas. They built at Prithudaka (Pehowa), on the banks of the Saraswati, three temples of Vishnu during the reign of Mahendrapala I. Kielhorn remarks that these three Tomara princes were probably connected with Delhi, and they might not have any political connection with Pehowa, a place of pilgrimage, where they, like many others from different parts of India, founded religious establishments. According to Firishta, Thanesar, about 20 miles (32 kilometres) east of Pehowa, was within the kingdom of Delhi in the early part of the 11th century.² About the beginning of the 10th century, as the Pratihara power began to decline, the Tomaras assumed independence. One of the Tomara rulers, Anangapala, founded the city of Delhi and made it his Capital. His successors, Tejapala, Madanapala, Kritpala, Lakhana-pala and Prithvipala, were rulers of note. The Tomaras came into conflict with the Chahamanas of Sakambhari, but continued to rule the Hariyana country till the middle of the 12th century when they were overthrown by the Chahamana Vigraharaja IV, also known as Visaladeva.

THE MEDIEVAL PERIOD

Our knowledge of the history of this area becomes more definite and detailed with the coming of Muslims. With Muslim invasions, the fortunes of the tract became identified with those of Delhi. This area became a battle-ground for the empire of Delhi. Three of the most decisive battles of medieval India were fought at different times at Panipat.

On receipt of the news of Mahmud of Ghazni's advance in A.D. 1011,³ Bijayapal,⁴ the Tomara Raja of Delhi, in whose kingdom Thanesar was

1. *Epigraphia Indica And Record of the Archaeological Survey of India*, Part IV, 1839 (Calcutta), pp. 242-50.

2. R. C. Majumdar, *The History and Culture of the Indian People*, Volume IV, *The Age of Imperial Kanauj*, 1964, pp. 111-12.

3. Ibid. Volume V, *The Struggle For Empire*, 1966, p. 23 fn. 7. However, *The Advanced History of India* by Majumdar, Raychaudhuri and Datta, published in 1956, p. 183, gives 1014 as the year of the conquest of Thanesar.

4. Wolseley Haig, *The Cambridge History of India*, Volume III, 1958, p. 18.

situated, sent messengers to other chiefs requesting them to join him in defence of the sacred city. It was emphasised that if the invader was not checked at Thanesar, the whole of India would be overwhelmed by the Muslims. But before the Hindus could rally their forces, Mahmud reached Thanesar, plundered the city, and broke a large number of idols, sparing the principal one, which was carried to Ghazni and placed in a public square for defilement.¹ Soon he sacked Mathura, Kanauj and annexed the Punjab which was eventually placed under a Governor at Sonapat. Within thirteen years of Sultan Mahmud's death in A.D. 1030, the Hindu chiefs formed a confederacy under the leadership of the Raja of Delhi to put an end to the Muslim rule in the Punjab. They wrested Hansi, Thanesar and other places from Governors who were posted there by Maudud, the grandson of Mahmud of Ghazni. The country between the Satluj and the Yamuna experienced relative peace for a century and a half until the Ghuris appeared on the scene towards the end of the 12th century.

In A.D. 1190-91 Muhammad Ghuri invaded India but was defeated by Prithviraja Chahamana (Chauhan) of Sakambhari in the battlefield of Tirawari (Taraori)², situated between Thanesar and Karnal. In order to avenge himself of the defeat, the Sultan again attacked India in 1192 and defeated Prithviraja at Tirawari (Taraori) and the latter was taken a prisoner or killed in the neighbourhood of the river Saraswati.³

After the Second Battle of Tirawari (Taraori) in 1192, the Karnal area was more or less firmly attached to Delhi till the close of the 14th century.

1. R. C. Majumdar, *The History and Culture of the Indian People*, Volume V, *The Struggle for Empire*, 1966, p. 11.

2. The name of the village where the battle was fought was not Narain or Naraina but Tarain, called Taraori. cf. *History of India* by Ishwari Prasad, published in 1952, p. 133, fn. 6.

The location of this site is the subject of some controversy. Minhaj calls it Tarain xxx Nizamuddin xxx and Firishta xxx follow Minhaj, but some later historians call it Narain. This later reading is obviously due to an inadvertant orthographical mistake in which the two dots of 't' have been reduced into one. Firishta, however, makes a further statement and says that it was also known as 'Tarawari' cf.

(*A Comprehensive History of India*, Volume Five—*The Delhi Sultanate* (A.D. 1206-1526) published in 1970 under the auspices of The Indian History Congress, p. 159, fn. 14.)

3. R. C. Majumdar, *The History and Culture of the Indian People*, Volume V, *The Struggle for Empire*, 1966, p. 112.

We learn that in A.D. 1215¹, Iltutmish captured Taj-ud-din Yildiz in open battle on the old battlefield of Tirawari (Taraori) when the latter challenged the Sultanate.² Later on, Raziyya, the Slave Queen, flying before the pursuing troops, halted at Kaithal, where her mercenaries deserted, and she was murdered on October 13, 1240, by robbers while resting under a tree.³

In the early forties of the 14th century, during the reign of Muhammad bin Tughluq (A.D. 1325—1351), there occurred a severe famine in the Kaithal territory and the surrounding areas. The Sultan tried to alleviate the sufferings, but with no success. He was soon faced with popular outbreaks in Sunam, Samana, Kaithal and Guhram. The Jat and Rajput tribes in this region formed mandals (strongholds), withheld the tribute, and created disturbances.⁴

Firuz Shah Tughluq (A.D. 1351—1388) had five canals excavated, two of which passed right across Karnal. The Rajiwah, excavated from the Yamuna, was made to pass through Karnal, Uncha Samana and then joining with other branches of Chittang (Choutang) river was conducted to Hisar (Hissar) through Dhatrut.⁵ The Ulughkhani Canal, taken out from the Sutlej (Satluj), passed through Karnal and Girnir on its way to Jajhar (Jhajjar).⁶ The Western Jumna (Yamuna) Canal is possibly the improved restoration of the canal excavated by Firuz Shah from the Yamuna to Hissar Firuza.

Historical episodes in the subsequent history of the Tughluq dynasty are connected with the Karnal district. In A.D. 1390, during the civil war which followed the death of Firuz Shah, Prince Humayun, grandson of Firuz Shah (afterwards Sultan Ala-ud-din Sikandar Shah), advanced from Samana and assembled a considerable force at Panipat in support of the cause of his father Nasir-ud-Din Muhammad Shah. He plundered the country almost up to the walls of Delhi, which was then held by Abu Bakr

1. According to *Advanced History of India*, p. 283, this happened in 1216.

2. Minhaj-ud-din bin Siraj, *Tabaqat-i-Nasiri*, p. 135. (Text edited by W. Nassau Lees, Calcutta, 1864.)

3. R. C. Majumdar, *The History and Culture of the Indian People*, Volume V, *The Struggle for Empire*, 1966, p. 139. It is also believed that she was murdered in or near Delhi.

4. M. Husain, *Life and Times of Muhammad bin Tughluq*, 1938, p. 164.

Ishwari Prasad, *History of the Qaraunah Turks in India*, 1936, p. 173.

5. Col. Colvin, J.A.S.B., 1833, No. 15, pp. 106-7.

6. J.M. Bannerjee, *History of Firoz Shah Tughluq*, published by Munshiram Manoharlal, p. 119.

son of Zafar Khan, the third son of Firuz. The latter sent a force against Prince Humayun who was defeated at Passina Khurd, seven miles (11 kilometres) south of Panipat.

During the first three years of the nominal reign (A.D. 1394—1412) of Nasir-ud-din Mahmud Shah (younger son of Nasir-ud-din Muhammad Shah), his cousin Nusrat Shah contested his supremacy, and thus there were two Sultans in Delhi. The result was a protracted civil war in which the *amir* of Panipat supported Nusrat Shah. Mallu Iqbal Khan, a chief, deserted Sultan Mahmud Shah and joined the party of Nusrat Shah. But a few days later he formed a conspiracy against Nusrat Shah who fled to Panipat and joined his *wazir* Tatar Khan. Mallu brought under his control Sultan Mahmud who became a mere tool in his hands. He marched along with the pageant King from Delhi to Panipat, the headquarters of Nusrat Khan and Tatar Khan. Tatar Khan evaded him, arrived at Delhi and besieged it. In the meantime, Mallu Iqbal Khan captured Panipat and took possession of the baggage and elephants left there by Tatar Khan, and reached Delhi in October 1398. Meanwhile, there occurred the invasion of Timur which swept away the Tughluq dynasty, and put an end to the Turkish rule in India.

Timur marched through the Karnal district on his way to Delhi. As described in his autobiography¹ and also in the Zafar-Nama², it is easy to trace his route throughout, except between Munak (Akalgarh) and Kaithal. It is almost certain that he crossed the Ghagghar and the Saraswati by bridges at Gula (Guhla) and Polar. From Kaithal, Timur marched and passed through Asandh to Tughlakpur, probably Salwan. The whole of this region had become desolate as the inhabitants had fled to Delhi. Thence he marched to Panipat, which he reached on December 3, 1398.³ The people had deserted the town in obedience to the orders from Delhi, but he found there 1,60,000 maunds of wheat, which he seized. He then marched six *kos* and encamped on the banks of "the river of Panipat which was on the road." It probably refers to a branch of the Yamuna flowing in the channel of the 'Buddhi Nadi'.

1. *Malfuzat-i-Timuri or Tuzak-i-Timuri*, translated in *The History of India As Told By Its Own Historians*, by H.M. Elliot and J. Dowson, Volume III, 1871 (London), pp. 389-477.

2. *Zafar-Nama* of Sharf-ud-din Ali Yazadi, (English translation of extracts in *The History of India As Told By Its Own Historians*, translated by H.M. Elliot and J. Dowson, Volume III, 1871 (London), pp. 478-522.)

3. *Karnal District Gazetteer*, 1918, p. 16.

In the anarchy that followed the departure of Timur, and in the subsequent struggle between the Saiyads and the Lodis, the tract was entirely separated from Delhi, and belonged, first to the ruler of Samana, and eventually to the Lodi rulers of the Punjab.

During the reign of Bahlul Lodi (A. D. 1451—1489), his son Prince Nizam Khan, afterwards Sikandar Lodi, seized Panipat and held it as Jagir without permission.¹ He made it his headquarters, and his force there included 1,500 cavalry. Sikandar, as a king (A.D. 1489—1517), however, frequently razed temples to the ground and erected mosques and public utility buildings in their place. It is, therefore, no wonder that Thanesar was invaded and badly sacked in his time.²

Karnal and Panipat were on the high road from Sirhind and Ferozpur (Ferozepur) to Delhi; and from the time of Timur to that of Akbar, or for 150 years, this tract witnessed important and decision making battles fought between the ruling powers of Delhi and those coming from the north-west with the intention of supplanting their authority.

First Battle of Panipat.—In A.D. 1525, Ala-ud-din Alim Khan, an uncle of the Sultans was sent by Babar with a Mughal army against his nephew Sultan Ibrahim Lodi, and was joined with additional forces at Indri by Mian Suliman, a *Pirzada* of Panipat. Being defeated near Delhi, he retreated to Panipat, where he tricked his friend Suliman out of three or four lakhs and went back. He shortly afterwards rejoined Babar; and next year the Mughal army marched on Delhi.

Leaving Ambala, Babar marched *via* Shahabad (Shahbad) to Yamuna near Alahar (tahsil Jagadhri), and thence followed the river bank to Karnal. There he heard that Ala-ud-din, whom he had sent on towards Delhi, had, this time, been defeated by Ibrahim, and that the latter had advanced to Ganaur. Mounting his horse at the Gharaunda Sarai, Babar led his army to Panipat, which he selected for the battle field, as the town would cover one of his flanks. He arrayed his army about two *kos* to the east of the town, with his right flank resting on the walls. Ibrahim Lodi took up a position at the same distance to the south-west of the town. On April 12, 1526 A.D.,³ Babar was

1. Even before his accession to the throne on April 19, 1451, the entire area covering Dipalpur, Lahore, Panipat and Sirhind was under the control of Bahlul.

2. *The History of India As Told By Its Own Historians* translated by H. M. Elliot and J. Dowson, Volume IV, 1872 (London), pp. 439-40.

3. Wolseley Haig, *The Cambridge History of India*, Volume IV, *The Mughal Period*, 1963, p. 13.

ready to receive Ibrahim's attack but for a week nothing more than skirmishes occurred. At length, on April 21, 1526 A.D., Ibrahim Lodi's forces advanced to the attack, were utterly routed, and were pursued by Babar's army to Delhi. Babar himself remained encamped for a week to the west of Panipat before proceeding to Delhi. He treated the people well and made Sultan Muhammad Angluli, who had assisted him with troops, Governor of Panipat. Babar's victory over Ibrahim who had been defeated and slain in spite of overwhelming superiority in numbers, destroyed the power of the Lodi dynasty and transferred the empire of Hindustan from the Afghans to the Mughal dynasty, otherwise known as the Gurgani Chagatai dynasty.

District under the Mughals.—This area continued to be restive during the early years of the Mughal rule. After the battle, Babar laid out a garden and built a mosque and a tank at Panipat. The name of the garden is Kabil, Kabul or Kabuli Bagh.¹ Some years later when Humayun defeated Salim Shah about 4 miles (6.4 kilometres) north of Panipat, he added a masonry platform and called it Chabutra Fateh Mubarak. In 1529, the Mandhar Rajputs of the Nardak tract rebelled under their chief, Mohan, and defeated the Mughal troops. Babar then burnt the rebel villages. Later, during the struggle which led to the expulsion of Humayun, Fateh Khan, Jat, rebelled and laid the country waste as far south as Panipat.²

Second Battle of Panipat.—When Humayun died at Delhi in A.D. 1556, the young Akbar, who was then in the Punjab, marched at once under the guardianship of Bairam Khan to meet the Afghan Army under Himu (a Dhusear of Rewari)³, the Hindu General of Adil Shah. Himu, after inflicting a severe defeat on the Mughal forces, occupied Delhi. Bairam Khan and Akbar after passing through Thanesar, arrayed their army 10 miles (16 kilometres) north of Karnal, and then marched to Panipat. Himu, whose army was far superior in numbers, was encamped more or less at the same site, previously occupied by Ibrahim Lodi, that is two *kos* to the west of Panipat. After a week's skirmishing, Akbar sent a detachment round the town to take Himu in the rear, and he himself advanced to the attack. Himu fought heroically but was killed and the result was the total rout of the

1. Some say that when Babar saw this plain ground he said that the spot was Kabil-i-Bagh (fit for a garden); others, that he planned the garden on the pattern customary in Kabul. According to Colebrooke, Babar gave the name to the garden after the name of his favourite queen Kabuli Begam. (*Journal of the Royal Asiatic Society*, Volume XIII, p. 279.)

2. *Karnal District Gazetteer*, 1918, pp. 17-8.

3. *Gurgaon District Gazetteer*, 1910, p. 64.

Afghans. Immediately after the victory, Iskandar Khan, the Uzbek, was sent in pursuit of the fleeing enemy. He followed them, with great slaughter, to the gates of the capital, which he entered and secured for the emperor.¹

During the reigns of Akbar and his successors the Mughal empire was so firmly established at Delhi that the Karnal district can hardly be said to have possessed a separate history. However, a few events are connected with the district.

In 1567, while Akbar was encamped at Thanesar, an extraordinary incident is said to have occurred, which throws a rather unpleasant light on the ferocious aspect of his character. The *sanyasis*, or *fakirs*, who assembled at the holy tank were divided into two parties, which Abu-l-Fazl calls Kurs and Puris. The leader of the latter complained to the king that the Kurs had unjustly occupied the accustomed sitting-place of the Puris, who were thus debarred from collecting the pilgrims' alms. Neither party would listen to friendly counsel. Both factions begged permission that the dispute might be decided by fighting. The desired leave having been granted, the hostile crowds drew up in line, and the fight began with swords, one man on each side advancing in braggart fashion and starting the fray. Swords were discarded for bows and arrows, and these again for stones. Akbar, seeing that the Puris were outnumbered, gave the signal to some of his more savage followers to help the weaker party. The reinforcement enabled the Puris to drive the Kurs into headlong flight. The vanquished were pursued and a number of 'the wretches sent to annihilation'. The author of *Tabaqat-i-Akbari* agrees with Abu-l-Fazl that 'the Emperor greatly enjoyed the sight'.²

In A.D. 1573, the rebel Ibrahim Husain Mirza, defeated by Akbar in Gujarat, moved northwards with the object of creating disturbances in Upper India, and the surrounding country. He passed through the district and plundered Panipat and Karnal.

In 1606, prince Khusrav, escaped from his semi-confinement at Agra and made his way to the Punjab gathering troops on the way. He passed through the district, plundering and pillaging as he went. When he reached Panipat he was joined by one Abdul Rahim. Dilawar Ali Khan, who was at Panipat with an Imperial force, retreated before them to Lahore. Jahangir (A.D. 1605—1627) himself shortly followed in pursuit to capture the rebel

1. Wolseley Haig, *The Cambridge History of India*, Volume IV, *The Mughal Period*, 1973, pp. 72-73.

2. V. A. Smith, *Akbar The Great Moghul*, 1966, pp. 56-70.

prince. He used to moralise on the success which Panipat had always brought to his family. The Friday prayers were always held in the mosque of Kabul Bagh which Babar had built. This custom was continued till the Marathas occupied the mosque in the Third Battle of Panipat (A.D. 1761).

For about two centuries the tract enjoyed peace under the Mughals. Civil order obtained as the normal rule of life. The Shah Nahar (Royal Canal) was made from the Yamuna; *kos minars* were erected at short distances and serais and wells were constructed for the use of travellers along the route of the Grand Trunk Road passing through this area. The *minars* (brick pillars, 6—9 metres high) and wells still exist in the district; the serais of Samalkha and Gharaunda are in ruins while that of Karnal has disappeared. With the decline of the Mughal empire, the growth of Maratha power in North India and the rise of the Sikhs in Punjab, this area lost its former stability and remained very disturbed for about a century. In 1709-10, Banda Bairagi, the disciple of Guru Gobind Singh, in an effort to continue the fight against oppression, collected an army of Sikhs and occupied the whole of the country west of the Yamuna. He laid the whole neighbourhood waste and especially the neighbourhood of Karnal, where he killed the Faujdar and massacred the inhabitants. He was repulsed by Bahadur Shah about twelve miles (19 kilometres) north-east of Sadhaura (Ambala district) in December 1710.¹

Towards the close of 1738, Nadir Shah invaded India. Emperor Muhammad Shah (A.D. 1719-1748) with an enormous army occupied a strongly fortified camp at Karnal. Nadir Shah marched to Tirawari (Taraori) which surrendered to him after a very brief bombardment in February 1739. Nadir Shah, now finding that dense jungle would impede a direct advance from the north of Karnal, inclined slightly to his right and encamped in the open plain to the west of the town.² He sent Prince Nasr-ullah Mirza, his youngest son, with a considerable force to a spot north of the Shah Nahar close to Karnal. All this time Muhammad Shah was not aware that Nadir Shah was in such close neighbourhood. Just at this time a detachment sent by Nadir Shah, instead of opposing Burhan-ul-Mulk (Saadat Khan of Oudh), came to close quarters with Muhammad Shah's camp. Nadir Shah and his son marched to the support of this detachment and cut off Muhammad Shah's supplies from the open country in the rear. Muhammad Shah was

1. Wolseley Haig, *The Cambridge History of India*, Volume IV, *The Mughal Period*, 1963, p. 323.

2. *Ibid.* p. 359.

starved into submission, and yielded to the invader who led him in his train to Delhi.

A decade later, in 1748 when Ahmad Shah Durrani invaded the Punjab, the Mughal forces sent against him under Prince Ahmad, passed through Panipat and Karnal, and advanced to Machiwara on the Satluj. On the way back to Delhi, Prince Ahmad was crowned as Emperor in the camp at Panipat as Emperor Muhammad Shah had died at Delhi.

When Alamgir II (A.D. 1754—59) was raised to the throne in 1754 by Wazir Ghazi-ud-din, anarchy prevailed throughout the Punjab. In 1756, the Wazir, taking with him his puppet emperor, marched from Delhi to regain this lost province. The expedition proved a failure largely on account of a mutiny on the part of the officers of a highly paid corps, who clamoured for their arrears of pay. As he tried to quell the tumult the excited soldiery got hold of him and dragged him through the streets. His life was spared at the intercession of the Emperor. After this the corps was attacked and taught a severe lesson.

Henceforward, for more than half a century, a time of horror followed in this area which was fittingly ushered in by the greatest of all the battles of Panipat,¹ known as the Third Battle of Panipat.

Third Battle of Panipat.—At the close of the rainy season of 1760, the Marathas under Sadashiv Rao Bhau marched upon Kunjpura. The fort of Kunjpura was well-stocked with money and provisions, of which the Marathas were in sore need. It was held by Nijabat Khan with 10,000 picked Rohillas. It was seized by the Marathas after a fierce bombardment. The garrison was put to the sword on the pretext that Nijabat Khan had been responsible for the death of Dattaji Sindhia at Badaun Ghat. The Yamuna being in flood, Ahmad Shah who was in the Doab, was unable to cross the river in time to prevent this disaster while the Marathas proceeded unchecked to encamp at the village of Panina Kalan (Panipat tahsil). At length Ahmad Shah forded the river near Baghpat and advanced against the Marathas who retreated to Panipat. There the Marathas strongly fortified themselves. The Durrani encamped close in front of them on the plain north of Risalu and Ujah. For five months while the two armies, numbering more than 4,00,000, remained engaged in fruitless negotiations and constant skirmishes, the whole country around was devastated by the opposing hordes. The inhabitants of the countryside fled; besides Panipat, only three villages, Phurlak,

1. *Karnal District Gazetteer, 1918*, p. 20.

Daha, and Bala (Karnal tahsil) were inhabited at the time of the actual battle. At length supplies wholly failed; and on January 14, 1761 the Bhau advanced to action. The Marathas were utterly routed and many of them were driven into the town of Panipat, whence next morning the conqueror brought them out, distributed the women and children among his troops and massacred the men in cold blood. The fugitives were followed all over the country, and killed wherever they were overtaken. It is said that 1,00,000 Marathas were slain in this battle. The people still point out the site of an old mango tree where the Bhau stood to watch the fight.

The appearance of Sikhs in the district.—On the retirement of Ahmad Shah Durrani from the Punjab in December 1762, the Sikhs appeared on the scene. On January 14, 1764, they defeated and killed Zain Khan, the Durrani Governor of Sirhind, and took possession of the whole of Sirhind province as far south as Panipat.¹ The noted Sikh chiefs who commanded sub-contingents of troops under the Misdars at once dispersed in various directions and according to their strength seized what fell in the way of each. Raja Gajpat Singh seized Jind, Safidon, Panipat, Karnal, Bazidpur and Rohtak. Mehar Singh Nirmala seized the *parganah* of Shahabad (Shahabad) and Ismailabad situated on the Grand Trunk Road, 16 miles (about 26 kilometres) south of Ambala. Sahib Singh and Gurdit Singh, the two brothers seized Ladwa, Indri, Babain and Shamgarh territories consisting of 117 villages. Bhai Mit Singh together with his two nephews Bhanga Singh and Bhag Singh, seized the territories of Pehowa and the suburbs of Thanesar. Dulcha Singh Karorsinghia occupied Radaur and Damli. The Afghan Nawab of Kunjpura managed with difficulty to retain the total revenue of a number of estates (53 villages, worth half a lakh a year); in the case of others he was forced to give a share to the Shamgarh Chief and the Sikhs of Churni.²

During his seventh campaign (December 1764—March 1765), Ahmad Shah Durrani, after the battle of Jullundur Doab with the Sikhs, reached Kunjpura by the end of February 1765. There he halted for some days and discussed plans of the action to be adopted in order to crush the Sikhs, but weather conditions being unfavourable, he decided to return to Afghanistan.

Amir-ul-Umara Najib-ud-daulah, the Mir Bakshi of the Mughal Empire, then held the charge of Hariyana. Soon after the Diwali celebrations

1. Hari Ram Gupta, *A History of the Sikhs*, Volume I, 1952, pp. 197-213. [But *Karnal District Gazetteer*, 1918 (p.21) placed the fall of Sirhind in 1763.]

2. *Karnal District Gazetteer*, 1918, p. 21.

(October 14) of 1765 at Amritsar, the Sikhs made for Hariyana and commenced plundering Najib's villages. Najib-ud-daulah, who had anticipated this irruption and had been making preparations, marched to oppose their advance, and met them near Shamli, 12 miles (19 kilometres) east of Karnal. After having fought for two days furiously, the Sikhs crossed the Yamuna with all their baggage and camp in the darkness. In the morning not one horseman of them was left.¹

The off and on plundering by the Sikhs in the parganas of Karnal and Panipat continued in the following few years. Najib-ud-daulah fought many battles with them but was defeated in 1768.² Later on, taking advantage of the illness of Najib-ud-daulah, the Sikhs launched their raids and arrived near Panipat on the 4th January, 1770, plundering and ravaging the country as they went. Najib's eldest son, Zabita Khan, tried to oppose them, but he could not carry out his plans properly. The Sikhs plundered every village between Panipat and Delhi.³

On the death of Najib-ud-daulah on October 31, 1770, Zabita Khan succeeded to his estates including the district of Panipat. No sooner was the news of the removal of the strong hand of Najib-ud-daulah known to the Sikhs, than they carried several plundering raids into the Panipat area.⁴ Complete anarchy prevailed in the tract in which were situated the towns of Sonipat (Sonepat), Panipat and Karnal. It formed a sort of no-man's land between the Sikh and Maratha powers, coveted by both but protected by neither. It fell a victim to every freebooter who happened to come that way.⁵

Mughal Ali Khan, the Governor-designate of Sirhind helped by Daler Khan, son of Nijabat Khan of Kunjpura, with a body of 500 horse was attacked near Kunjpura by Sahib Singh, Dyal Singh, Dana Singh and Laja Singh with a body of 6,000 horse. Severe fighting took place and continued the whole day in which about 500 men were killed on both sides. In the darkness of the night Mughal Ali Khan and Daler Khan repaired to the fort. The Sikhs immediately besieged it. Hostilities continued for thirteen days. On the 14th day, the Mughal soldiers were defeated and on the advice of Daler Khan, Mughal Ali retired to Delhi.⁶

1. Buddha Prakasha, *Glimpses of Hariyana*, 1967, p. 60.

2. Ibid. p. 62.

3. Ibid. p. 63.

4. Ibid. p. 64.

5. *Imperial Gazetteer of India, Provincial Series, Punjab*, Volume I, 1908, p. 303.

6. Hari Ram Gupta, *History of the Sikhs*, Volume II, 1944, pp. 46-7.

Mughal Ali's defeat was a great shock to the Mughal Emperor, but the pleasure-seeking court of Delhi swallowed the bitter pill without showing any sign of their displeasure. The success of the Sikhs, however, alarmed Janko Rao, the Maratha chief, stationed at the capital. At the head of a strong force he marched from Delhi into Panipat and Karnal districts.¹ His movements caused consternation among the Sikh chiefs of the Cis-Satluj, who believed that the Maratha chief was coming to punish them. The Maratha General, however, showed no signs of hostility, and did not advance farther than Pehowa.² The purpose of his visit was partly to take a religious bath in the holy stream and partly to find out if the Sikhs were up to any other mischief. On his return after a short while, the Sikh chiefs of the neighbourhood heaved a sigh of relief.

In 1774, Gajpat Singh seized Karnal. Shortly afterwards Najaf Khan, the Imperial Wazir, marched in person to restore his authority, and by a treaty then concluded between the Rajas and the Emperor, the Sikhs relinquished their conquests in Karnal and its neighbourhood, excepting seven villages which Gajpat Singh was allowed to keep, and which probably included Shera, Majra Jatan, Dharmgarh, Bal Jatan and Bala.³

Samru, the deputy of Faujdar of Sirhind, was assigned the districts of Sonipat (Sonepat) and Panipat, and was authorised to possess himself of whatever territory he could wrest from the Sikhs, in particular from Gajpat Singh of Jind, whose territory lay quite adjacent to the area under his charge.

Samru took charge of his post early in July 1774 at the head of nearly 2,000 soldiers, some of whom were Europeans, with five pieces of cannon, a considerable quantity of ammunition and six elephants. He garrisoned Gharaunda which had been evacuated by the Sikhs who assembled at Karnal. Samru finding that his position was not tenable, resigned his job. Just about this time, on a request from Warren Hastings, Governor of Bengal (1772—1785), Samru was dismissed from the service by the Emperor.⁴

Accompanied by Prince Mirza Jakan Shah Farkhunda Bakht, Nawab Abdul Ahad Khan left Delhi for Patiala to deal with the Sikh menace in June 1779, with 50,000 horse and foot and 200 pieces of cannon, and marched along the western bank of the Yamuna. In July they were encamped at a distance of two *kos* from Panipat. At Karnal many Sikh chiefs including

1. Hari Ram Gupta, *History of the Sikhs*, Volume II, 1944, pp. 47-8.

2. L. H. Griffin, *The Rajas of the Punjab*, 1870, p. 38.

3. *Karnal District Gazetteer*, 1918, p. 22.

4. Hari Ram Gupta, *History of the Sikhs*, Volume II, 1944, pp. 52-3.

Sahib Singh Khondah, Diwan Singh, Baghel Singh and Karam Singh Nirmala waited upon the Nawab; but the Prince was not happy to have the Sikhs in his army as he did not trust them. Gajpat Singh, a *zamindar* of Karnal, the most loyal Sikh *sardar* of the Emperor, on paying homage to the Mughal Prince, was made to pay a tribute of two lakhs of rupees. Abdul Ahad Khan received three lakhs of rupees as tribute from another Sikh chief, Desu Singh of Kaithal and took his son, Lal Singh as a hostage for the payment of one lakh more. Bhanga Singh and Bhag Singh also joined the Imperial camp at Thanesar on the 12th September.

Abdul Ahad moved his camp towards Patiala on the 22nd September, and crossed the Saraswati stream near Pehowa. He encamped at Siyana Sayadan (about 6 kilometres north of Pehowa). On the 27th, the camp moved forward and on the 28th Abdul Ahad marched on to Ghuram (about 24 kilometres south of Patiala), which became the base of operations of the Imperial forces. At this stage, the Karnal contingent deserted him and the Nawab was forced to fall back to Panipat. The Sikhs plundered everything they could lay their hands on during his retreat.

Thereafter, complete anarchy prevailed in the Cis-Satluj country which was accentuated by internecine warfare among the Sikh chiefs themselves. Sahib Singh Khondah, Dulcha Singh, Bhag Singh and other Sikhs attacked Thanesar to oust Bhanga Singh. They also asked Zabita Khan, the Mir Bakshi of Delhi, to help them in expelling Desu Singh's sons from Kaithal and to acknowledge their rule over Thanesar.

Mirza Shafi, assisted by Zabita Khan, was appointed in charge of a regular campaign against the Sikhs. Shafi maintained his ground at Kunjpura for two months. When the Sikhs entered the Ganga Doab, he chased them back into the Cis-Satluj territory. Husanpur was plundered, and Baghel Singh's military post was expelled from Indri. The guerilla tactics of the Sikhs gave him no peace, and his temporary successes achieved no lasting results.¹ The *Amils* (Mughal officers in charge) of Buriya, Sadhaura and Shahabad (Shahbad) were given no rest by the Sikhs. They continued harassing the *Amil* of Shahabad (Shahbad), who in spite of his precarious condition and repeated appeals received no reinforcements. Ultimately he surrendered. This fact greatly disheartened Shafi who made a pathetic appeal to Delhi for reinforcement. In June 1781, Shafi sent Jai Singh Rai to Diwan Singh, Baghel Singh and Gurdit Singh to settle terms of peace. He offered them Radaur, Babain and Shamgarh in return for the

1. Hari Ram Gupta, *History of the Sikhs*, Volume II, 1944, pp. 94, 102, 104-05, 106-24.

booty of Shahabad (Shahbad) but the Sikhs did not agree. He was then compelled to make peace with the Sikhs, generally on their own terms. Gajpat Singh was recognised as the ruler of Jind area with the title of Maharaja (July 12, 1781), and his tribute was fixed at rupees six lakhs. Zabita Khan and Gajpat Singh interviewed the other Sikh chiefs and persuaded them to come to an agreement with the Delhi Government. Thus the Mughal Emperor of India formally accepted the sovereignty of the Sikhs over the country situated to the west of the Yamuna, and admitted their right of blackmail in the Upper Ganga Doab.¹ This peace was, however, short lived. In 1782, Emperor Shah Alam was forced by circumstances to seek the protection of Mahadaji Sindhia and to appoint him Vakil-i-Mutliq (Regent Plenipotentiary) combining the office of the Wazir and the Commander-in-Chief.

Sindhia dominated the politics of northern India for a decade to come. The presence of the Sikhs in the Ganga Doab greatly alarmed him. He took various steps to counteract this danger. He won over the celebrated Begam Samru of Sardhana, a woman of masculine intrepidity and correct judgment, added several parganas to her jagir, some to the west of the Yamuna in order to keep a check upon the Sikhs. Ambaji Ingle was appointed Faujdar of the districts north of Delhi with the main object of protecting the capital from the Sikhs. At the same time he made a treaty with the Sikhs in 1785 which provided for the safety of crown-lands situated between Delhi and Panipat. Not content with this, Sindhia despatched his officers to various parts of the district to overawe the Sikhs into submission. The Marathas received submission from the Sardars of Thanesar and Kaithal and also received rupees five lakhs from Dewan Nanu Mall of Patiala. In 1787, Ambaji Ingle, under orders from Mahadaji, led an expedition into the Sikh territory with the object of exacting tribute from the Sikh chiefs. After taking some action he appointed Bakshi Shyam Rao as his deputy at Karnal and returned to join Sindhia. Bakshi Shyam Rao, not being able to maintain his position at Karnal, handed it over to Bhag Singh of Jind and escorted by Diwan Singh proceeded to Delhi ceding Panipat to Begum Samru on the way.

When the Sikhs offended the Marathas by offering asylum to the mother of Ghulam Kadir, the Rohilla chief who had captured Delhi in 1727, an expedition was launched against them. Rane Khan, Ali Bahadur, and others, entrusted with this operation, crossed the Yamuna, reached Kunjpura and threatened to invade Patiala. But the expedition failed to achieve

1. Hari Ram Gupta, *History of the Sikhs*, Volume II, 1944, pp. 123, 134-35.

anything.¹ Encouraged by their success, the Sikhs assembled in large numbers to invade the Doab and ravaged the country lying between Karnal and Sonipat (Sonepat).

Curiously at this stage the Marathas were called upon to defend the Patiala territory. Nanu Mall sent his son to wait upon Sindhia and appeal to him for help. Upon this, Sindhia despatched Devji Gavle and Bapuji Malhar at the head of a force. About the end of May they reached Sonipat (Sonepat) where they plundered a few villages and realized fifty thousand rupees as tribute. The Maratha generals halted at Panipat and refrained from marching further into the heart of the Sikh country. Sindhia also sent Begam Samru to Panipat to join the two Maratha commanders. By now the Sikh chiefs had come to regard the Maratha raids as a normal occurrence and nobody took them seriously.

Devi Ditta, son of Dewan Nanu Mall of Patiala was staying in Sindhia's camp as a hostage for the tribute expected from Patiala. At Nanu Mall's death, Sindhia appointed him to the charge of the Karnal district with 500 Maratha troops in recognition of his valuable service. Devi Ditta led an expedition against the Ranghars of Gharaunda, and established peace and order. He also defeated Gurdit Singh of Ladwa who attacked Karnal. When he and later on, his brother Sipahi Mall fell fighting against the Ranghars, Karnal was seized by Bhanga Singh of Thanesar.

Nana Rao, a Maratha chief appointed to realize revenues from the Cis-Satluj Sikhs, soon found that his task was a difficult one. The fluid politics of the Sikh chiefs could not be relied upon. As he arrived at Panipat in 1795, several agents of the Sikh chiefs attended on him. He proceeded to Karnal and demanded a tribute of Rs. 5,000 from Bhanga Singh of Thanesar. He also called Gulsher Khan, Karam Singh Nirmala, Gurdit Singh, Jodh Singh Kalsia and Rai Singh Bhangi for the same purpose. He helped Gulsher Khan, Nawab of Kunjpura to obtain Biana (about 26 kilometres north of Karnal) from Bhanga Singh of Thanesar. To achieve success Nana Rao exploited the mutual rivalries among the Sikhs and used one chief against another. Rai Singh Bhangi of Buriya saw through this game. He did not like the civil war among the Sikh chiefs at a time when the Marathas were staying in their country. His success in persuading the various Sikh chiefs to his view, therefore, made things difficult for Nana Rao who, however, pushed on his plan of attacking Thanesar.

1. Ganda Singh, *The Maratha-Sikh Relations, Panjab Past and Present*, October 1967, p. 341.

Bhag Singh quitted Thanesar and at the request of the Brahmans of Thanesar, Nana Rao spared the city and appointed one infantry regiment and five hundred horse to protect the town.

The Sikhs being disappointed at the loss of Thanesar tried to excite Lal Singh of Kaithal to claim it as it originally belonged to his family. On his refusal to do so they turned against him and as he was proclaimed to be very rich, incited Nana Rao to demand a heavy tribute from him. They also advised Nana Rao to secure a large sum from Patiala.¹ These demands of Nana Rao united Lal Singh and Bibi Sahib Kaur of Patiala, who was a woman of remarkable generalship and diplomacy. At the same time, Nana Rao was being pursued by Bhanga Singh of Thanesar who made night attacks on the Marathas. As his supplies were also running short, Nana Rao made up his mind to retreat. He failed to collect any tribute from Patiala. He only received Rs. 5,000 from Karam Singh Nirmala in exchange for the fort of Gumthala (Thanesar tahsil) which belonged to Bhanga Singh. The latter, however, crept back into Thanesar as the Marathas left.

We must now turn our attention to George Thomas, an Irish adventurer whom Sindhia had appointed in 1795 to the charge of the Sonapat (Panipat), and Karnal districts with 2,000 infantry, 200 cavalry and 16 pieces of field artillery. Finding that Thomas would be a helpful hand, Bapuji Malhar, Governor of Saharanpur, took him into his service in 1797. As the Sikhs interfered with the affairs of the Maratha Governor of Saharanpur, Thomas marched to Karnal in 1798 where a body of Sikhs had gathered in rebellion against the Maratha rule. Here four successive actions were fought, in which both sides sustained heavy losses. Thomas's artillery always proved superior to the tactics of the Sikhs who did not possess this arm. In this fight Thomas lost 500 men and the Sikhs nearly twice as much. Peace was then concluded, and, in accordance with its terms, the Sikhs evacuated the place.² Soon after differences arose between George Thomas and his master Bapuji, who dismissed him. Thereafter, Thomas reverted to the profession of freebooter. His growing power filled his mind with ambition and he thought of carving out an independent principality for himself in the tract known as Hariyana. He established himself at Hansi and commanded a circle of 800 villages including Maham.

Sindhia was determined to quell the Sikh chiefs in the Cis-Sutlej territory. In 1799, he despatched his largest regular force for this purpose

1. Hari Ram Gupta, *History of the Sikhs*, Volume II, 1944, pp. 256-60.

2. Ibid. pp. 260-62, 271-72.

under Parron, who reached Karnal and summoned Raja Sahib Singh of Patiala, Raja Bhag Singh of Jind, Bhanga Singh of Thanesar, Gurdatt Singh of Ladwa, Bhai Lal Singh of Kaithal, and several other petty *sardars*. Equally determined to resist, the Sikh chiefs opposed him. In order to strengthen his position, Parron began to employ local Muslims against the Sikhs. The first to join was Gulsher Khan of Kunjpura, who shortly collected as many as 10,000 horsemen. Parron then marched to Thanesar, but Bhanga Singh escaped to Patiala. The Sikhs, however, came to terms and a peace treaty was signed on the 10th March, 1799. Parron stayed at Thanesar long enough for all the Sikh chiefs between the Yamuna and the Satluj to visit him. Leaving Thanesar, he made for Panipat where he was joined by Begam Samru with four battalions.¹

In 1801, George Thomas, who had established himself in Hansi made an effort to harass Karnal and Panipat. The Sikhs asked the Marathas for help against him. Daulat Rao Sindhia who became jealous of Thomas's progress, agreed to do so on the Sikhs promising to become his subsidiaries and pay him five lakhs of rupees. Sindhia sent the French General Parron against him. In the battle that followed Thomas lost all his conquests, retired to British territory and shortly afterwards died on his way to Calcutta. Safidon and Dhatrat were then made over again to Jind by the Marathas.²

In 1803, the power of the Marathas in North India was completely broken, and the Karnal district with Daulat Rao Sindhia's other possessions west of the Yamuna, passed on to the British by the Treaty of Surji Arjungaon, signed on December 30, 1803. The chiefs of Ladwa and Thanesar, with five thousand Sikhs, had fought against the British at the battle of Delhi. Immediately after the battle, Begam Samru made her submission to General Lake; and Bhag Singh of Jind and Lal Singh of Kaithal were hardly less prompt. Their advances were favourably received, and in January 1805, they joined their forces with the British. The Sikh chiefs, who had actually fought against the British at Delhi, continued to display active hostility, till they were finally routed by Col. Burn at the end of 1804. In March 1805, an amnesty was proclaimed to all the Sikhs on condition of peaceable behaviour; but Gurdatt Singh of Ladwa was expressly excluded from this amnesty, and in April of the same year the English forces marched upon his fort of Karnal and captured it.³

1. Hari Ram Gupta, *History of the Sikhs*, Volume II, 1944, pp. 276-77.

2. *Karnal District Gazetteer*, 1918, p. 23.

3. *Ibid.* pp. 23-24.

THE MODERN PERIOD

This area had experienced varying political disturbances in the eighteenth century. These were identified with the terms *Singhashahi ka Ram Raula* or *Bhaogardi*, the 'Sikh hurly-burly' or the 'Maratha anarchy'. The Mughal authority had lost its grip over this region. The Sikhs never really established their grasp over the country south of Panipat; and they held, what they did possess, only as feudatories of the Marathas. But the whole period was a constant contest between these three powers; and the tract formed a sort of no-man's land, coveted by all but protected by none. It was practically the prey of the strongest and most audacious freebooter of the day whether hailing from the Punjab or the Deccan, for nobody cared to spare for to-morrow what he might only possess for to-day. Even as early as 1760, Ahmad Shah Abdali had to approach Delhi by way of the Ganga Doab, as owing to the constant passage to and fro of the Maratha troops, the country was so desolated that supplies were unprocurable; and in 1803, when the British took over the district, it was estimated that more than four-fifths was overrun by forest, and its inhabitants either removed or exterminated. The royal canal had long dried up, and thick forest had taken the place of cultivation, and afforded shelter to thieves, vagabonds and beasts of prey.¹

The East India Company at that time being not in favour of acquiring territory west of the Yamuna, parcelled out this area between petty chiefs. The sovereign powers of the Rajas of Jind, Kaithal, Ladwa, Thanesar and Shamgarh and of the Nawab of Kunjpura were confirmed and they were continued in the lands held by them under treaty from the Marathas, except that Ladwa was deprived of Karnal. The pargana of Karnal was bestowed on the Mandals² in exchange for their lands in the Yamuna Doab. Besides, other minor adjustments were also made.

The policy, which bade the British abstain from interference west of the Yamuna, changed with the altered political circumstances in Europe. When in 1806, Ranjit Singh crossed the Satluj with his army and marched to Thanesar, it was realized that the Satluj must become the north-western boundary of the British territorial influence. Negotiations followed and finally a treaty was signed in 1809 by which Ranjit Singh was prevented from making any encroachments south of the Satluj. At the same time all the chiefs between the Satluj and the Yamuna were taken under British protection.

1. *Karnal District Gazetteer*, 1918, p. 24.

2. The Mandals are said to have come from Samana, Patiala district (Punjab). That section of the Mandals whose head was the titular Nawab of Karnal, was found by Lord Lake in 1804, established on the eastern bank of the Yamuna.

As the records of the Ambala Agency testify, from 1809 to 1847 persistent efforts were made in vain to enforce good government through the political agency at Ambala among the endless semi-independent Chiefs in this area. The British Government sought to remedy this situation by enforcing its claims to lapse by escheat on the death without lineal heirs of the possessors of 1809 or their descendants. It was thus that the British districts of Ambala and Thanesar gradually grew up, each successive lapse being made the occasion for regular settlements of the village revenues and the introduction of direct British rule. However, each remaining chief, great and small alike, had within his own territory absolute civil, criminal and fiscal jurisdiction, subject only to the general authority of the Agent to the Governor-General. No tribute was taken from them, and though they were required, in the case of war, to aid the Government, yet no special contingent was fixed. The Cis-Satluj chiefs enjoyed a complete immunity from invasion, and retained their rights of sovereignty. The right to escheats was the sole right which the Government demanded in return for its protection. In fact, with the exception of a few territories which had lapsed from failure of heirs, each chief still found himself the ruler of the territory which he or his forefathers had held at the time when they passed under the British protection.

In 1846-47, a fresh step was taken by the British Government after experiencing the passive obstruction or open reluctance on the part of the chiefs when called upon to assist with supplies and men during the First Sikh War against the Lahore Durbar in 1845. Only a few chiefs abstained from open rebellion. In any case with its expansion of territory and political influences across the Satluj after the First Sikh War, the British Government could hardly afford the Cis-Satluj chiefs to exercise almost unlimited power. Consequently, sweeping measures were introduced to reduce their privileges. The police jurisdiction of most of the chiefs as well as all transit and custom duties were abolished and a commutation was accepted for the personal service of the chief and his contingent. The only States exempted were Patiala, Jind, Nabha, Faridkot, Malerkotla, Chhachhrauli (Kalsia), Raikot, Buriya and Mamdot.¹ The police jurisdiction was made over to European officers in the territories of the remaining chiefs. However, it soon became apparent that the chiefs, deprived of their police jurisdiction, were unable to collect their revenue. A proposal was, therefore, made for a regular settlement of the land revenue. But before final orders were passed on this point, the second Sikh campaign

1. Nabha was exceptionally treated, one-quarter of its territory having been condscated.

had commenced. It ended in the annexation of the Punjab in 1849. In the same year, it was declared that, with the exception of the States already mentioned, all the chiefs should "cease to hold sovereign powers, should lose all criminal, civil and fiscal jurisdiction, and should be considered as no more than ordinary subjects of the British Government in the possession of certain exceptional privileges". The chiefs of Kunjpura, Thanesar and Shamgarh were treated in this manner. The revenues were still to be theirs, but were to be assessed by British officers and under British rules. The final step was taken in 1852 when the revenue settlement begun for British villages was extended to the villages of the chiefs. Thereafter, the chiefs ceased to retain any relics of their former power except that they were still permitted to collect direct from their villages the cash assessment of revenue as fixed at the time of settlement. They sank to the position of *jagirdars*, who retained a right to the revenue assigned to them in perpetuity subject only to lapse on failure of heirs.

HISTORY OF PRINCIPALITIES¹

The detailed history of the Kaithal, Ladwa, Thanesar and Kunjpura States which are now part of the district cannot be given here. We can only stop to mention the principal features relating to their origin and administration.

KAITHAL²

Kaithal in the time of Muhammad Shah (A.D. 1719—48) was a pargana consisting of 13 *tappas*. In A.D. 1733, it was held from the Delhi Government in jagir by one Qamr-ud-din Khan, a Baluch by tribe. This man was slain in the massacre of Delhi by Nadir Shah in A.D. 1739. Azimullah Khan, his successor, seeing the declining state of the empire, endeavoured to shake off his allegiance and assume independence. Ikhtiar Khan, an Afghan, was one of the principal *zamindars* whom he engaged. The latter sometimes paid but frequently resisted and appropriated the revenues. In A.D. 1751, Inayat Khan Afghan, an influential *zamindar*, persuaded the people to join him in resisting the demands of the Baluchis, raised a considerable force for the purpose, and enjoyed the revenues himself. Matters continued in this state till 1755.

In A.D. 1756, Tahawwur Khan, brother of Qamr-ud-din, made an unsuccessful attempt to recover the Kaithal jagir from Inayat Khan.

1. For an account of the chiefs and families of note in the Karnal district, refer to L.H. Griffin, *Chiefs and Families of Note in the Punjab*, Volume I, 1909, pp. 9-48.

2. *Karnal District Gazetteer*, 1918, pp. 30-31.

Thus ended the Baluch possession. The family of Inayat Khan continued in possession of Kaithal till A.D. 1767, when Bhai Desu Singh marched against Kaithal, which succumbed after a weak resistance, and thus commenced the Sikh rule. Bhai Budha Singh, his eldest brother, seized Thanesar and Pehowa. Bhai Desu Singh built the original fort of Kaithal and several small forts around Kaithal, numerous *kachcha* dams along the Saraswati and brought a water-course from Mangna to Kaithal.

Of the three sons of Desu Singh, Khushhal Singh died in childhood. Bahal Singh succeeded to the rule as his elder brother, Lal Singh, was under restraint at Delhi. Lal Singh's mother obtained his release on payment of Rs. 40,000. He shortly returned and assumed the Government, driving his brother, who strongly opposed him, to Kularan. Bahal Singh acquired Budhlada, but was soon put to death by hired assassins.

Lal Singh proved the greatest chief of his dynasty. He was regarded as the most powerful of the Cis-Satluj *Sardars* after the Raja of Patiala. He is described as having been a very able man, though he was utterly untrustworthy, unscrupulous and of a violent disposition. He was held in some respect by the lesser chiefs who frequently submitted to his arbitration. He acquired large tracts of land by plundering his neighbours on all sides. He succeeded in regaining possession of the much coveted Thanesar which originally belonged to the Bhaïs of Kaithal, but which had been captured by their old rivals Bhanga Singh and Bhag Singh of the Dallewala Misl from Manjha. He did good service to Parron in defeating George Thomas, and was rewarded in consequence by the gift of pargana Sular on payment of a *nazarana* of Rs. 60,000, little better than one year's revenue. His services were acknowledged by Lord Lake by the grant of Gohana (Rohtak district) for life. He joined the British forces in the pursuit of Jaswant Rao Holkar up to the Satluj. He rendered good service to General Ochterlony in the Gorkha War, and was liberally treated. He had been a firm ally of Raja Bhag Singh of Jind all his life, and on more than one occasion had come to his assistance in repelling the attacks of George Thomas.

Lal Singh resided chiefly at Kaithal. He added to the fort of Kaithal, and, in fact, may almost be said to have re-built it, for it was nothing but a mud building before. He ruled for 33 years and died in A.D. 1818.

On Lal Singh's death, his sons, Partab Singh and Udai Singh, being 4 and 3 years old respectively, the Government was carried on in the name of Partab Singh, under the regency of his mother (Sahib Kaur); but the boy only lived to the age of 12 years, and died of smallpox.

Udai Singh, still a boy, succeeded under the regency of his mother, who continued to exercise very great influence in public affairs even when he came of age. Udai Singh was a weak-minded youth, without ambition and without energy to keep what his father had acquired. During his chiefship the disorder and affrays on the Kaithal frontier became so serious, stopping all trade and disturbing the peace of the whole country, that a strong remonstrance was addressed by the British authorities to him and the neighbouring *Sardars*, who were jointly responsible for the good government of the area.

Udai Singh resided chiefly at Kaithal but frequently at Pehowa, and both places bear witness of his taste for architecture. He enlarged and beautified the fort of Kaithal, built a palace there, after the model of Ochterlony's house at Karnal, only on a more imposing scale, and near it a bridge over the Bidkiyar lake. At Pehowa, the garden house is a credit to his architectural taste, but was left incomplete on his death. A masonry dam that he erected across the Saraswati, which threw water down a cut irrigating numerous villages for 16 miles (about 26 kilometres) towards Kaithal, was destroyed by the British authorities after the escheat. In private life Udai Singh was a debauch, in public a tyrant. He was bedridden for some years of his later life, and died at Kaithal on March 14, 1843, when the greater part of the estate lapsed to the British. Only that territory which was acquired by Gurbakhsh Singh, the original founder of the family, was conferred upon Bhai Gulab Singh and Bhai Sangat Singh of Arnoli, collaterals of Udai Singh in the third generation. They also ceased to exercise administrative functions in 1849.¹

This lapse was highly distasteful to the Phulkian chiefs of Patiala, Jind and Nabha, who, as relatives of the deceased, were desirous of retaining the possession in the family. But nothing came of their efforts to influence the British Government nor did the insurrection of the people who had been excited at the prospect of loss of Kaithal produce any result in spite of the fight they gave and Kaithal was finally taken over in 1843.

LADWA²

The founders of the Ladwa estate were Sahib Singh and Gurdit Singh who mastered Babain and Ladwa, Shamgarh, Saga, Karnal and some villages of Panipat. They had come from the Manjha³, and established

1. *Karnal District Gazetteer*, 1918, p. 34.

2. *Ibid.*

3. The Manjha Sikhs inhabited the country in the Upper Bari Doab; later the country also came to be known as Manjha.

themselves at Babain and Ladwa. After the defeat of the Afghans at Sirhind in 1764 A.D., these *Sardars* lost Panipat and Karnal. Sahib Singh, who was afterwards killed in action near Karnal, bestowed Shamgarh on his brother-in-law, Kirpal Singh, who accompanied the confederacy in the conquest.

Gurdit Singh was succeeded by his son, Ajit Singh, who obtained the title of Raja from Lord Auckland for building a bridge over the Saraswati at Thanesar. He sided with the Sikhs during the First Anglo-Sikh War (1845-46) and was imprisoned at Allahabad. The estate lapsed in 1846.

KUNJPURA¹

The founder of the Kunjpura family was a Pathan named Nijabat Khan who flourished in the early part of the eighteenth century. He built a strong tower in the Yamuna marshes and named it Kunjpura, 'The Heron's Nest'.² The Chakladar of Saharanpur, Izzat Khan, advanced against the freebooter but was killed by one of Nijabat Khan's relations. The Emperor of Delhi, hearing the death of his Chakladar, enticed Nijabat Khan through the intercession of Mulraj, Governor of Panipat and kept him there as a prisoner for one year. Eventually he was released; and his estate Nijabat Nagar, and other villages were granted to him in jagir on condition of his restraining the restless Jats and Rajputs from causing disturbances.

Nijabat Khan submitted to Nadir Shah in A.D. 1739 and supplied him with provisions. He became a Risaldar of 1,000 *swars* and was recognised as rightful owner of Kunjpura by the new power. The Maratha army under Sada Shiv Bhau plundered Kunjpura in 1760 when Nijabat Khan was killed. Nijabat's eldest son, Daler Khan succeeded in escaping across the Yamuna, and had his revenge in the following year by taking part in the battle of Panipat, when the Marathas suffered a crushing defeat at the hands of the Durranis.

Daler Khan's assistance to the Durranis was evidently of considerable value, and he was confirmed in the rule and revenues of Kunjpura, Indri and Azimabad. The grant extended over 150 villages in Karnal, Indri, Thanesar, Shahabad (Shahbad) and Badauli. The mahals of Karnal and Safidon were afterwards bestowed in lieu of certain other villages resumed. Daler Khan and his successor Gulsher Khan had to struggle hard to maintain their

1. L.H. Griffin, *Chiefs and Families of Note in the Punjab*, Volume I, 1909, pp. 13-23.

2. His sons renamed the fort and called it Nijabat Nagar.

position against the encroachments of the Sikhs. Some family possessions had to be surrendered, in other cases part of an estate was kept while the remainder was given.

The head of the Kunjpura house enjoyed the title of Nawab, and his jurisdiction as a semi-independent chief was only lost to him under the operations of Lord Hardinge's order in 1846. Thereafter the Nawabs of Kunjpura were mere Jagirdars, occasionally exercising judicial powers specially conferred. The Nawabs of Kunjpura migrated to Pakistan after the Partition and the estate was acquired as an evacuee property.

THANESAR¹

The founder of the Thanesar chiefship was Mith Singh. He belonged to Manjha and came to this region with the *Dallewalia mist* in company with his nephews Bhag Singh and Bhanga Singh. The royal fort at Thanesar was held by the troops of the Bhaïs of Kaithal under the command of Desu Singh. Bhag Singh and Bhanga Singh waited their opportunity in the neighbourhood, while Mith Singh advanced with the conquering Sikhs, and was killed at Meerut. Bhanga Singh and Bhag Singh, with the assistance of the *Ladwa Sardars* and Karam Singh Nirmala of Shahabad (Shahbad), after one failure, made a successful night attack and possessed themselves of the fort of Thanesar. After the death of Bhai Desu Singh of Kaithal, a large part of his possessions in Indri, and some estates near Pehowa fell into the hands of the two Thanesar *Sardars* and of the *Ladwa* Chief. The territory conquered by Bhanga Singh and Bhag Singh comprised a number of estates in the present Indri pargana, some villages in Pehowa, and a large tract in the Thanesar tahsil. A partition was made, Bhanga Singh taking 3/5 and Bhag Singh 2/5. Bhanga Singh was a savage and determined ruler, and was the only *Cis-Satluj* chief whom Ranjit Singh feared. He died in 1815, leaving a son, Fateh Singh and a daughter by his wedded wife, and a son, Sahib Singh, by a concubine. The daughter, Karam Kaur, married Karm Singh, the Raja of Patiala, and six villages of Indri were given as her dowry. Sahib Singh had a jagir of 9½ villages in Indri, and was succeeded by his son, Bishan Singh, who died without a male issue. The remainder of Bhanga Singh's estate descended to his son, Fateh Singh, who died in 1819 leaving his mother Mai Jian and two young widows. Mai Jian managed the estate till 1830, and died in 1836. Ratan Kaur, one of the widows, died in 1844, leaving the other widow Chand Kaur, in possession of the estate, which lapsed on her death in 1850.

1. *Karnal District Gazetteer*, 1918, pp. 36-37.

Bhag Singh, the brother of Bhanga Singh, died in 1791 leaving four sons, three of whom died childless. The estate descended to Jamiat Singh, the son of the youngest brother, Baj Singh, who also died childless in 1832, when the estate lapsed.

UPRISING OF 1857

The Uprising of 1857 clearly showed that the people in many areas of this district rose in opposition to British authority. To have a clear view of the happenings of the Uprising of 1857, it seems essential to keep in mind the then administrative set-up of the areas now forming the Karnal district. The Panipat and Karnal tahsils comprised the then Panipat district while the remaining portion, viz. Thanesar, Kaithal and Gula (Guhla) tahsils, formed a part of the then Thanesar district.

The British authorities felt that it was of the utmost importance to keep open the road between Ambala and Meerut to facilitate the junction of the forces from these two points. Both on account of its proximity to Delhi and its location on the highroad from Ambala, it was in the interest of the British to put down all opposition in this area.

The district of Panipat on account of its location was under the heel of the British. It was a frequent sight for the civil population to see British forces marching to and from Delhi and the Punjab.¹ Besides, all the important towns of the district were heavily guarded by the forces of the Patiala and Jind chiefs, who, to protect their own interests, were aligned to the cause of the British.

As soon as the news of the happenings of 1857 reached Jind, the Raja collected his troops and, reaching Karnal on the 18th of May, he prevented the local opposition from gathering strength. He then marched down the Grand Trunk Road in advance of the British columns and after recovering Panipat and Samalkha from the opposing forces of freedom fighters, kept the road open for the British forces between Karnal and Delhi. The Maharaja of Patiala too helped the British by holding Karnal, Thanesar and Ambala and keeping the road open from Karnal to Phillaur. In spite of such arrangements, the company of the 5th Native Infantry posted at Thanesar went into action but it was disarmed on July 14.

The civil population rose in almost every big village. Consequently, the civil administration was thrown out of gear, the revenue and police

1. *Kaye's and Malleeson's History of the Indian Mutiny of 1857-8*, edited by colonel Malleeson, 1914, Volume VI, p. 140.

officers ceased to function and even many zamindars and important villagers were in no mood to help the British.

In the Panipat Bangar, 16 of the largest Jat villages in the Naultha *zail* refused to pay their revenue, and joined action in the Rohtak district. Another 19 large villages, mostly in the Bhalsi and Kuran *zails* rose in opposition, burnt some Government buildings and refused to pay revenue. The Gujars also rose and joined hands. These freedom fighters had to pay heavily for their courage. The British were merciless in their atrocities after the Uprising was suppressed. All these villages, besides being fined, were punished in various other ways; and *Lambardars'* allowances to the amount of Rs. 7,317, representing a revenue of Rs. 1,46,340 were confiscated.¹

In the town of Panipat, those up in arms against the Government collected in the shrine of Buali Shah Qalandar. They would have attacked the Collector's office but the Jind troops prevented them from doing so. The British behaved mercilessly; hostages were seized, people were hanged and the pension of the shrine was reduced considerably. The Tahsildar of Gharaunda, a Panipat man, was removed on charges of disaffection.

The Nardak area did not lag behind the Bangar. Some of the large villages notably Siwan, Asandh, Jalmana, Bala, Dachar, Gandar and Salwan refused to pay revenue and defied the British authority. A force of about 250 troops was sent from Karnal under Captain Hughes on July 13. This force was checked at village Bala, about 40 kilometres from Karnal, by a force of the Jats comprising 900 match-lockmen and many mounted sowars. After a fierce fight that lasted a short while, the Jats compelled the enemy to flee away. Captain Hughes dispatched a messenger to Karnal for reinforcements and he himself encamped in the jungle near by. But during the night the Ranghars flocked in from the neighbouring villages. They numbered about 3,000; under shelter of a small jungle and the banks of a canal, they kept up a harassing fire. Captain Hughes could not withstand this pressure and at the day-break of July 14, effected his retreat. Meanwhile, the reinforcements comprising two guns of the Nawab of Karnal (Ahmad Ali Khan) and 50 Sikhs (Patiala men), with 20 of the Nawab's troopers, arrived. Coming up un-noticed, they suddenly opened fire. After much loss, the Ranghars had to leave the ground.²

1. *Karnal District Gazetteer*, 1918, p. 40.

2. Cave-Browne, Rev. J., *The Punjab and Delhi in 1857, Volume II*, pp. 143-44. (Reprinted by the Languages Department, Punjab, 1970.)

The village of Bala was re-attacked. The Jats took up the defensive in a strong building, the double barricades of which could defy any enemy without artillery. When the fire of guns of the British force caused considerable damage to the building, its inmates, coming out in the open, launched an attack on the enemy. The British cavalry, by a flank manoeuvre, got between the rebels and the towns-people with speed and completely encircled them. In the grim battle that ensued, nearly 100 Jats fell and the day was lost. The losses of the British side were limited to two Indian officers and three troopers, fifteen wounded and several horses killed. Captain Hughes' own horse received three wounds.¹

The villages around Bala were sacked and made to pay heavy fines in addition to the arrears of revenue. But this in no way dispirited the people. Hardly had the British force left Karnal, when they again started their activities. A huge force assembled at the village of Jalmana and gave fight to Lieutenant Pearson who had attacked them. The opposition grew so strong that he failed to register a victory over them. He asked for reinforcement but not getting any owing to the precarious British position at Panipat and Ambala, he retired from the field.

The Deputy Commissioner of Panipat learnt on June 8 that a hostile force of the freedom fighters was on its way from Jullundur to Delhi. He thought that this force might march upon Ambala and Patiala but in any case Thanesar was certain to be attacked. The Maharaja of Patiala took an alarm at it and withdrew his forces from Thanesar to protect his own capital. Under these circumstances, Lieutenant Pearson was called back leaving Jalmana as it was. In fact, the Jullundur force proceeded to Delhi and did not attack any of these places.

With the danger over, Lieutenant Pearson on June 15, re-directed his attention to settling the Kaithal region and brought it under control. Similarly, the Ladwa villages which had successfully risen in opposition were attacked and destroyed by the Deputy Commissioner of Thanesar.

Towards the western side of the district, the opposition to the British was still brewing. The Ranghars living in the area, collected in great numbers, attacked and captured the Asandh police station. On hearing this, Pearson advanced towards Asandh with a strong force. But so strong was the opposition of the Ranghars that he could not dare to attack them; on the contrary he was attacked and pushed back by them.

1. Buddha Prakash, *Glimpses of Hariyana*, 1967, p. 97.

While these events were happening, the position of the British had become more favourable for them in the districts of Hisar (Hissar) and Rohtak. Similarly, the work of suppressing the opposition in Asandh, Jalmana and other villages was taken in hand with the help of the Patiala force. The village of Asandh was bombarded and reduced to ashes.¹ The British also cruelly burnt the village of Jalmana. All other villages met a similar fate. Heavy fines were realized from all these villages at the point of the bayonet.

GROWTH OF POLITICAL STRUGGLE

Like other districts of the south-east Punjab, roughly comprising Haryana, Karnal was tagged with the Punjab after the Uprising of 1857. As a measure of punishment, the district was not included for any of the development programmes. Moreover, there was an advantage in keeping it economically and educationally backward, in order to use it as a recruiting area for the British army.

India began to change in the 19th century, and the pace of change quickened as the years went by. The introduction of English education opened the door to western influence by exposing the educated classes to western ideas. This change affected the whole country in varying degrees and the Karnal district was no exception, though its pace was slow. While it affected other aspects of life, it was particularly noticeable in the political outlook which engendered discontent. Signs of popular awakening in the district were not lacking. The Arya Samaj played an important part in this awakening. It was founded in the Holi Mohalla, Karnal, in the beginning of the present century.

The World War I broke out in 1914 and the district contributed its share in the supply of manpower. It also contributed substantially to the Aeroplane Fund, the Imperial Indian Relief Fund, Comforts Funds and the War Loans.

During the World War I, people had hoped that the defeat of Germany would usher in an era of peace. This hope did not come true. "After the Armistice was concluded in November 1918, the prevailing abnormal conditions, instead of vanishing, became aggravated, particularly in relation to high prices. The ordinary people naturally became discontented with their lot. There was widespread famine in the country owing to the failure of the monsoon of 1918, and the prevalence of influenza and

1. *Karnal District Gazetteer*, 1918, p. 41.

other epidemics had resulted in a very heavy mortality.”¹ In Punjab, the Government under Michael O’ Dwyer came to be regarded by the educated and politically-minded classes as opposed to their aspirations. The passage of Rowlatt Acts aggravated the situation and demonstrations of various kinds were made to secure the repeal of the measure. Mahatma Gandhi joined the agitation and advised passive resistance against these obnoxious Acts. In response to his call partial hartal was observed at Panipat on the 30th March, 1919, and a meeting was held in the town. An Urdu handwritten notice advocating mourning and prayers for passive resistance was found stuck in the bazaar at Karnal. To arrange for the hartal on the 6th April, mass meetings were held at Karnal on the 4th and the 5th April. The hartal on the 6th April was observed successfully at Karnal but it failed at Panipat. On the 9th April, Ram Naumi was celebrated at Panipat and at *Rath Yatra* Hindus and Muhammadans fraternized and organised demonstrations in honour of Mahatma Gandhi. On the 11th April, a complete hartal was observed at Panipat in connection with the arrest of Gandhiji at Palwal. A Delhi freedom fighter, Bhagwanji delivered strong speeches and a warrant under Defence of India Act was subsequently issued for his arrest.

On the 12th April, a general Railway, Post and Telegraph strike was threatened at Karnal. The same day, a meeting was held at Shahabad (Shahbad) to arrange for observance of hartal on the following day. In the evening Hindus and Sikhs congregated in the Imambara and fraternized with Muhammadans. At Panipat, a contribution was levied on a shopkeeper who had not observed hartal on the 11th April. A complete hartal was observed at Shahabad (Shahbad) on the 13th April. Efforts were also made at Thanesar to form a Hindu-Muslim *panchayat* to settle cases.

The massacre of Jallianwala Bagh became the focal point of the national movement of resistance all over the country. There were demonstrations throughout the district against this horrible massacre of April 13, 1919. A public meeting was held at Karnal. A procession followed by a public meeting was observed at Panipat.

On the 18th April, considerable excitement prevailed at Panipat owing to pressure from some Delhi freedom fighters. The same day, a meeting was held at Fatehpur (Pundri). An unsuccessful attempt at hartal was also made at Pundri. Hartal was observed at Kaithal, during which about 100 Hindu and Muslim boys visited the railway station and tried to induce the railway staff to strike. Ladwa was visited by an unknown bare-footed and bare-headed

1. *Disorders Inquiry Committee Report, 1920*, p. 107.

Muhammadan, who convened a meeting of Hindus and Muslims, whom he informed that the Muslims of Delhi had given up cow-killing and urged them to follow Delhi's example and promote Hindu-Muslim unity. He also told them that the Delhi people had vowed to remain bare-headed and bare-footed till Gandhiji was set at liberty. On the 19th April, the people damaged Kaithal Railway Station. The Government suppressed their movements with a strong hand.

In 1920, Gandhiji in alliance with the Khilafat leaders launched a Non-violent Non-Cooperation Campaign throughout India to bring the British administration to a standstill. Henceforward, the course of events in the district was in line with what happened elsewhere. The Congress movement was started in the district that year and Congress Committees were formed at various places. The Khilafat movement was also started and Khilafat Day was observed at Panipat on March 3, 1920, and non-cooperation resolutions were passed. A District Political Conference was organised at Karnal with Lala Lajpat Rai as its chairman. The participation of the people in Non-Cooperation Movement led to several arrests at Panipat, Kaithal, Shahabad (Shahbad), Salwan and Gagsina.

Thereafter, the district followed the line of action laid down by the Congress for the whole country. In compliance with Gandhiji's appeal for funds, Lala Lajpat Rai toured the district. The people responded enthusiastically and a good sum was collected. To suppress the movement, the Government arrested many of the leaders which resulted in slackness of political activity.

In 1930, the Indian National Congress decided on complete independence to be the goal of India. It authorised the All-India Congress Committee to launch a Civil Disobedience Movement. Many villages in the district showed signs of dis-affection. On his visits to Salwan, the Commissioner, Ambala Division, was greeted with black flags. A police party was posted there by way of punishment. Many arrests were made throughout the district. The Civil Disobedience Movement was suspended in 1931 in consequence of the Gandhi-Irwin Pact. On its renewal in 1932, the Civil Disobedience work was organised by the volunteers throughout the district. On request, three parties of four volunteers each from villages Gagsina and Salwan proceeded to Lahore and courted arrests there. Besides, many other persons from Karnal, Kaithal, Shahabad (Shahbad), Panipat, Salwan and Utlana Kalan were arrested. The movement continued unabated till May 1934, when it languished.

After the suspension of Civil Disobedience Movement, the Congress decided to participate in the elections of 1937 to the legislatures and local bodies. Hectic electioneering activity followed and many meetings were organised.

Political activity was kept alive on the basis of local and national issues after the elections of 1937. Protests were organised against *begar* and the high-handedness of local officers. A Chamar Sabha was organised to voice the grievances of their community.

The leading persons of the district unanimously approved the 'Quit India' resolution adopted by the Congress in 1942. The Congress Committees were declared unlawful by the Government. This led to a sharp reaction. There were explosions in the Karnal Post Office aimed at setting fire to the dak. The distillery was set on fire and at several places, Government buildings were damaged. The national flag was installed and unfurled on the Municipal Committee Building, Karnal in spite of the strict watch kept there by the police guards. The police lathi-charged the gathering in front of the building. Many of them along with their leader, Man Singh Rahi, were arrested and sent to Central Jail, Multan.¹ The Government took stern action and curbed the movement by putting the political leaders behind the bars.

When many of the political workers in urban areas had been arrested or had gone underground, workers started pouring in from rural areas. A batch of workers came from Gagsina to unfurl the national flag on the tahsil building at Karnal. A severe lathi-charge was made which resulted in serious injuries to several persons. The authorities became more stern and caused suffering to many political workers.

The youth of the district serving in the British Indian army in South East Asia joined the Indian National Army in large numbers and fought bravely under the leadership of Subhash Chandra Bose. Subsequent events like the death of Subhash Chandra Bose and the trial of I.N.A. personnel who were regarded as heroes, caused a great stir in the public mind here as elsewhere.

When Independence came, the district celebrated the Independence Day on August 15, 1947, with great enthusiasm. The migration of large numbers of people from West Punjab (Pakistan) created numerous problems of settlement and social re-adjustment. The last two decades have witnessed change in many directions. The subsequent Chapters will throw light on what developments have been made in different spheres of activity during this period.

1. Man Singh Rahi became seriously ill and died in jail in 1944.

However, one of the most significant developments has been that the district passed on to Haryana on November 1, 1966, when this new State was created. Since then the following ministries have existed under the leadership of the Chief Ministers whose names are given below :

Name	From	To
Bhagwat Dayal Sharma	November 1, 1966	March 24, 1967 (Forenoon)
Birender Singh	March 24, 1967	November 21, 1967 (Forenoon)
Bansi Lal	May 21, 1968	Continuing

During the period between November 21, 1967 and May 21, 1968, the State remained under the President's rule.

We are too near the present to view the historical importance of these changes.





सत्यमेव जयते

Chapter III

PEOPLE

POPULATION

Of the seven districts of the State, Karnal according to 1961 Census, ranked second in respect of population. It was inhabited by 14,90,430 persons (8,04,769 males and 6,85,661 females). The first population assessment in the district was made in 1853. As the boundaries of the district underwent considerable changes afterwards, a comparison of earlier population figures with later figures is not possible. The district as constituted at present had 8,70,823 persons in 1901. During the subsequent 60 years (1901—61) this number increased by 71.15 per cent. The population variation since 1901 has been as below :

Census year	Population	Variation	Percentage increase (+) or decrease(—)
1901	8,70,823		
1911	7,88,236	(—)82,587	(—)9.48
1921	8,15,967	(+)27,731	(+)3.52
1931	8,38,700	(+)22,733	(+)2.79
1941	9,78,868	(+)1,40,168	(+)16.71
1951	10,77,381 ¹	(+)98,513	(+)10.06
1961	14,90,430	(+)4,13,049	(+)38.34
1901—61		(+)6,19,607	(+)71.15

1. Actually the total population recorded at the 1951 Census was 10,79,379 persons. This figure was adjusted to 10,77,381 persons at the 1961 Census according to the territorial jurisdiction of the district prevailing in 1961.

The major portion of the increase in population occurred during the years 1931—61. The decade 1901—11 was marked by severe ravages of plague and malaria which took a heavy toll of the population. During 1911—21 occurred the great influenza epidemic. The decade 1921—31 was generally healthy but the population was almost static. It expanded faster during 1931—41. The decade 1941—51 showed an increase of 10 per cent in the population. The local population actually increased by 22 per cent but this increase was reduced by shifting of the Muslim population in large numbers in the wake of the Partition. The number of non-Muslim immigrants who came in was less than the number of outgoing Muslims by 53,875.¹ The years 1951—61 were free from disease, and the public health measures taken by the Government reduced the death rate while the birth rate went up. The rapid extension in agriculture and industrialisation, particularly during the post-Partition period under the Five-Year Plans has also contributed to this high rate (38.34 per cent) of growth in population which was the highest in this period of 60 years.

Place of birth.—Of the total persons enumerated in the district in 1961 about 60.45 per cent were born at the place of enumeration. This percentage was composed of 64.08 rural and 42.92 urban population, denoting a higher degree of mobility in towns. Similar percentage in respect of males and females was 72.39 and 46.44 respectively. The low figure for females results from their leaving the ancestral place after marriage. Out of the remaining 39.55 per cent of population recorded as having come from other places, 13.40 per cent were born at another place within the district. Persons born outside the district but within the State (pre-organised Punjab) formed 8.65 per cent of the population. Of the remaining 17.50 per cent coming from outside, 2.95 per cent had come from other States in India, mainly from Uttar Pradesh (34,645), Delhi (3,577), Rajasthan (3,078) and Jammu and Kashmir (1,179). Persons from Uttar Pradesh and Rajasthan were mainly found in rural areas and those from Delhi and Jammu and Kashmir in urban areas. The balance of 14.55 per cent mostly represented the population who had migrated to the district from other districts of the Punjab (Pakistan) after the Partition.

Density.—According to the 1961 Census the number of persons per square kilometre in the district works out to 187 (156 rural and 4,698 urban). The density remained almost unchanged during the first half of the

1. Against 3,04,346 Muslims of 1941 Census, almost all of whom migrated to Pakistan at the time of the Partition, 2,50,471 displaced persons were enumerated at 1951 Census as having settled in this district.

demographic divide (1901—31), but it shot up high in the subsequent decades on account of the increase in population and by 1961 it nearly doubled as is obvious from the following table :—

Census year	Area (Square kilometres)	Density (Population per square kilometre)
1901	8,166*	107
1911	8,166*	97
1921	8,094*	101
1931	8,094*	104
1941	8,096*	121
1951	8,228*	131
1961	8,190*	182
	7,964**	187

Standing second in point of population in the State, the district ranks fourth in density. The reason for lower density is sparse population in areas affected by floods and water-logging. The proportion between the rural and the urban population according to 1961 Census is 82.8 : 17.2 as compared to 81.2 : 18.8 in 1951. There has been relatively more increase in rural areas : the average population per inhabited village increased from 664 in 1951 to 915 in 1961. Density in the four tahsils in 1951 and 1961, as shown below, brings out the big rise during the 1951—61 decade :

Tahsil	Density (Population per square kilometre)	
	1951	1961
Kaithal	108	158
Thanesar	129	187
Karnal	146	200
Panipat	190	235

*This is according to the Surveyor General of India. (*Census of India, 1961, Volume XIII, Punjab, Part II-A, General Population Tables, p. 12.*)

***Census of India, 1961, Punjab, District Census Handbook, No. 4, Karnal District* (published in 1966), p. 160.

The towns in the district are generally more congested. The urban density of the district is 4,698 persons per square kilometre. Ladwa has the highest density of 12,706. Then come Gharaunda (11,286) and Shahabad (Shahbad) (10,781). Thanesar is the least congested town with 1,083 persons per square kilometre.

Houses and households.—Additional housing is essential to relieve the inconvenience of increased density as conditions of living and working are determined by it. During the period 1951—61, the rural dwellings increased by 26.7 per cent as against an increase of 41.3 per cent in population and the urban dwellings increased by 18.8 per cent as against an increase of 25.7 per cent in population. The district recorded an overall increase of 25.1 per cent in housing as against an overall increase of 38.3 per cent in population. As the population advanced more than the dwellings, both in towns and villages, the problem of shortage of rural dwellings was rendered more acute.

The total of 3,87,155 houses (3,19,717 rural and 67,438 urban) in the district were occupied by 14,88,631 persons. The number of houseless persons comprising wandering tribes, tramps, *sadhus* and pavement dwellers was limited to 1,799.

Normally, a single house was used by one household¹ which on an average consisted of 5.7 persons.² The over-burdened households reflect the shortage of houses in the district.

Distribution of population.—There were 1,415 villages, 1,350 inhabited and 65 uninhabited according to the Census figures of 1961.³ The inhabited villages contained 82.8 per cent of the population. The remaining 17.2 per

1. The term household is taken to mean a group of persons who commonly live together and take their meals from a common kitchen unless exigencies of work prevent any one of them from doing so.

2. *Census of India, 1961, Volume XIII, Punjab, Part IV-A, Report on Housing and Establishments*, p. 15.

3. In fact, in 1961, according to the information supplied by the Deputy Commissioner, Karnal, there were 1,421 villages in all. Of these, 1,354 were inhabited and 67 uninhabited (*be-charag*). Most of these uninhabited villages were in areas subject to river action: 24 in the Karnal tahsil, 17 in the Thanesar tahsil, 14 in the Panipat tahsil and 12 in the Kaithal tahsil. In 1969 this number increased to 1,429 (1,357 inhabited and 72 uninhabited) as detailed in the Chapter on 'General Administration'.

The detailed analysis of the villages in the text is based on the Census figures given above.

cent of the population lived in 11 towns. The tahsil-wise distribution is exhibited in Table VI of Appendix.

The average number of persons per inhabited village in the district was 915. Among the tahsils, Panipat with an average of 1,279 and Kaithal with 1,192 were far above this average. Karnal with 885 and Thanesar with 538 were far below. The rural population could be grouped village-wise in different units as follows :—

Unit of population	Number of villages	Total population
Less than 200	172	21,103
Between 200 and 499	423	1,43,259
Between 500 and 999	377	2,64,952
Between 1,000 and 1,999	229	3,24,127
Between 2,000 and 4,999	131	3,66,025
Between 5,000 and 9,999	18	1,15,372
	1,350	12,34,838

The number of villages with population less than 200 was the maximum in the Karnal tahsil (64) and the Thanesar tahsil (61) because of the area being subject to river action and floods. The eastern region had been a scene of battles and warfare till about the time when the British took over. This could never be conducive to the growth of big villages, and we find that out of the 18 villages in the district of which the population exceeded 5,000, four were situated in the Karnal tahsil, one in the Panipat tahsil, eleven in the Kaithal tahsil, two in the Gula (Guhla) tahsil and none in the Thanesar tahsil. The same reason may account for the preponderance of villages with smaller population ranging between 200 and 999 in the Thanesar tahsil (307) and the Karnal tahsil (228).

Of the 11 towns in the district, there was no Class I town (technically called city with a population of 1,00,000 and above). Karnal and Panipat were

1. Tirawari (Taraori), Gondar, Jundla and Bala Khalsa (tahsil Karnal), Samalkha (tahsil Panipat), Keorak, Kaul, Habri, Pai, Karora, Rajaund, Chhattar, Asandh, Salwan, Moana and Alewah (tahsil Kaithal), and Siwan and Gumthala Garhu (tahsil Gula).

Class II towns (50,000 to 99,999). Kaithal came in the category of Class III towns (20,000 to 49,999), while Shahabad (Shahbad), Thanesar and Gharaunda were Class IV towns (10,000 to 19,999). The remaining towns, viz. Ladwa, Nilu Kheri (Nilo Kheri), Pundri, Pehowa and Radaur belonged to the category of Class V towns (5,000 to 9,999).

In 1951, the towns in the district numbered 12. Nilu Kheri (Nilo Kheri) and Radaur were declared towns for the first time in that year. During the decade 1951—61, two towns namely, Karnal Civil Lines and Kaithal Mandi lost their entity because of their merger with the adjoining towns, viz. Karnal and Kaithal respectively. Pehowa was declared a town for the first time in 1961. The variation of population in the towns during the decade is given in Table VII of Appendix.

Sex ratio.—According to 1961 Census there were 852 females per 1,000 males. Sex ratio figures for different years are given below :

Year	Females per thousand males		
	Rural	Urban	For the district
1911	820	901	828
1921	827	839	828
1931	818	796	815
1941	838	800	833
1951	853	881	858
1961	849	866	852

The above figures show a shift in favour of females. During 1951—61 there has, however, been a slight recession indicating male oriented immigration into the district during this period.¹

The females have a shorter span of life than the males. Males below the age of 15 years are 448 per thousand males; the corresponding figure for females is 465. The number of males per thousand between the age of 15 and 55 years was 470 and that of females 474. In the age group 55 years and above, the males were 82 and the females 60.

1. *Census of India, 1961, Volume XIII, Punjab, Part II-A, General Population Tables*, p. 60.

It is a common observation that a number of persons shift from villages to towns for study and livelihood. The low paid among them leave their families in their village homes and live in the towns by themselves. When past the age of useful work, some among them return to their villages. The effect of this type of movement is reflected in the statistics of rural and urban age composition. For age groups below 15, 15 to below 55, and 55 and above, the distribution among males is 454, 463 and 82 per thousand males in the rural area and 416, 500 and 83 in the urban area. The corresponding figures for females in the rural area are 472, 469 and 58 and in the urban area 432, 498 and 70.

Literacy.—In 1961, roughly speaking, one male out of three and one female out of nine could read and write. A little over half this number had had schooling and only one male in 26 and one female in 125 had crossed the Matriculation level. In the towns there were 634 per thousand males and 401 per thousand females who were literate but in the villages they were as few as 239 and 56 respectively. The rural people have a considerable leeway to make up in order to come up to the stage reached by the urban people. The comparative low literacy among females is associated with the social and economic backwardness of the people, especially those living in the rural areas.

LANGUAGE

Twenty spoken languages or dialects were recorded as mother-tongue in the district during the Census of 1961. Hindi was spoken by the largest number of persons as the following figures show :—

<u>Mother-tongue</u>	<u>Distribution per 1,000</u>
Hindi	863
Panjabi	133
Urdu	4

The composite character of the district is exemplified by the various dialects spoken within its boundaries. As we travel from north to south, we observe dialectic variations. Hindi with small admixture of Panjabi words is spoken, especially in the northern portion of the district. In the Panipat and Kaithal tahsils the Jats use many words which are not used in the rest of the district and their pronunciation and accent are quite peculiar to them. The quality of their speech closely resembles that of Rohtak Jats. The language

of the Thanesar tahsil and Indri Pargana of the Karnal tahsil is a curious admixture of dialects because of the mixture of Panjabi words with the local dialect. To the north of Kaithal the proximity of Panjabi speaking zone introduces a Panjabi element. The displaced persons who settled in this district speak Panjabi. Both the locals and the displaced persons have adopted many words from each other's language.

The various scripts used are : Devnagari for Hindi, Gurmukhi for Panjabi, Persian for Urdu, Roman for English, and Lande¹. After the emigration of Muslims in 1947, the use of Urdu has gradually given place to Hindi. Its use is now limited to the older generation. The younger generation mostly uses Hindi both in speech and writing in preference to Urdu. Some shopkeepers still maintain their account books in Lande.

RELIGIOUS LIFE

RELIGIOUS GROUPS

The religion-wise break-up of the population as per 1961 Census is shown below :

Religion	Number			Percentage
	Males	Females	Total	
Hindus	6,99,792	5,93,562	12,93,354	86.8
Sikhs	93,969	83,633	1,77,602	11.9
Muslims	8,369	5,790	14,159	0.1
Jains	1,555	1,652	3,207	0.2
Christians	1,071	1,023	2,094	0.1
Religion not stated	13	1	14	—
Total :	8,04,769	6,85,661	14,90,430	

Hindus.—The majority of the population of the district consists of Hindus. They form 86.8 per cent of the total population and predominate both in the rural and urban areas. An idea about their distribution can be

1. A script used by traders for book-keeping.

had from the following table :—

District/Tahsil		Number		
		Males	Females	Total
Karnal district	Urban	1,22,209	1,06,382	1,28,591
	Rural	5,77,583	4,87,180	10,64,763
	Total :	6,99,792	5,93,562	12,93,354
Karnal tahsil	Rural	1,65,412	1,40,272	3,05,684
Panipat tahsil	Rural	1,11,165	94,575	2,05,740
Thanesar tahsil	Rural	96,042	80,789	1,76,831
Kaithal tahsil (including Gula)	Rural	2,04,964	1,71,544	3,76,508

Most of the Hindus follow traditional Hindu beliefs and practise Sanatan Dharma.¹ They believe in Shiva, Vishnu, Hanumana, Rama and Krishana. It is true that all men know of Shiva and of Vishnu; that the peasant utters the name of Narayana even when he yawns; that Bhagwan is made responsible for everything that happens. They recognise the supremacy of the higher power; their daily concerns in their work-a-day world are, however, with a host of deities. These deities may be broadly divided into four classes; benevolent deities, such as the Sun, the Yamuna, Bhumia, Khwaja Khizr, and the like; the malevolent deities mostly females, such as the Smallpox Sisters, the Fairies, etc; the sainted deities such as Gugga; and the malevolent dead such as Sayyads (Shahids).

The religious practices of the Hindus all over Haryana are almost identical. The variations, if at all, are due to customs peculiar to each caste and family. Most of the temples are built to Vishnu and Shiva; some temples are, however, built to local deities. Very few people go to temples for worship while most go for *darshans* or for asking boons. The educated people mostly worship at home some of whom keep the image of their favourite deity. On occasions of *grih pravesh*, child birth, marriage, etc., the *purohit* is invited for worship. The Kurukshetra *tirthas* are imbued with a religious aura. The myths connected with Kurukshetra have so engrooved their minds that the Hindus

1. Sanatan Dharma Sabhas have been formed at various places to propagate the Sanatan Dharma.

spontaneously pay homage to its very name. Kurukshetra had been the scene of Mahabharata where *Gita*, the Song Celestial, was sung. For a Hindu, a visit to Kurukshetra is a very pious act. A bath in the holy tanks and visits to temples are considered as equal to the merit of performing a thousand *ashvamedha yajnas*. Pehowa is sanctified by the existence of the Saraswati, *par excellence*, and Hindus seek the salvation of their elders by visiting this place and offering *pindas*.

Charhawa (offerings), made mostly by women, generally takes the form of gram or milk or cooked food or a few sweetmeats offered in front of the deity, the priest putting a part on the platform where the deity is placed, and the remainder of the offering being given to the appropriate receiver. In many cases, the Brahmans are fed in the name of the Lord.

The practice of observing *shraddhas* in commemoration of the dead ancestors is also common. These are performed for 15 days before the commencement of *nauratrias*. Brahmans are fed on the *tiithi* (date) on which the ancestor died. *Khbir*, *halwa*, etc., are prepared and fed to the Brahmans. No member of the family takes meals before the performance of *shraddha*.

Shiva.—The district has been closely associated with Shiva worship from ancient times. According to the Puranic literature and the *Mahabharata*, the famous Sthanu Tirtha existed there and the place was so called after Sthanu (Shiva). A terra-cotta seal with a bull and a *kharoshthi* legend on it discovered from the mound known as Karan Ka Kila in Thanesar may also be corroborative of this view. Besides, a stone slab depicting four-armed Ganpati with Shiva and Parvati was discovered from Amin, five miles (8 kilometres) from Thanesar. The Chinese traveller Yuan Chwang also records the existence of some 100 Deva temples and people in great number belonging to different sects.

Shiva temples or *Shivalas* are found in larger number than other temples in the villages. The priests are Jogis, generally of the Kanphara or pierced-ear clan and they take the offerings. The worship of Shiva in the temples at Kurukshetra and Pehowa¹ is very popular.

Vishnu.—The district has also been closely associated with Vishnu cult and the *Mahabharata* refers to the various *tirthas* named after Vishnu. The famous idol of Jagson (Vishnu) in the temple of Chakrasvamin

1. The Panchmukhi Murti of Shiva at Pehowa is the only one of its type in the whole of India.

at Kurukshetra was removed to Ghazni by the Muslim invaders.¹ The Pehowa inscriptions also bear testimony to the practice of Vishnu worship and the existence of Vishnu temples.

The people still worship Vishnu but he is hardly recognised by them under that name though under the commoner names of Rama and Narayana he is the great god of the country. Temples dedicated to him exist in several big villages of the district. Vishnu worship in Kashipuri temple² at Kaithal is very popular.

Hanumana.—The followers of Vishnu are specially devoted to this deity and the images of Hanumana, the monkey god, are to be seen in most of the temples. Kaithal town is connected by traditions with Hanumana. It was named as Kapisthala, a Sanskrit word meaning an abode of monkeys. The deity is worshipped on Tuesdays in a temple situated in the heart of the town. Besides, in the east of the town, there is a mound said to be the birth place of Hanumana and as such it is known as 'Anjani Ka Tila', Anjani (Anjana) being the name of Hanumana's mother.

Rama.—Lord Rama is also worshipped by the people as the incarnation of Vishnu. Rama is worshipped on the occasion of Dussehra when Ram Lila or the story of the *Ramayana* is staged in various parts of the district. Truly speaking, Ram Lila has kept the folk-theatre alive.

Krishna.—The Kurukshetra tract is intimately connected with the life of Krishna. It was here that he acted as Arjuna's charioteer in the epic battle and sang the song Celestial, the *Gita*. Like Ram Lila, Krishna Lila also provides a favourite theme to the folk-theatre.

Minor deities.—Curiously enough most of the malevolent deities are worshipped by women and by children while at their mother's apron. Some Muslim *pirs* are also worshipped, particularly those that are the malevolent type, for it can do no harm to worship them, while they may be troublesome if not propitiated.

Sun God.—This is the god whom the people chiefly delight to honour. No shrine is ever built to this god, but Sunday is the day sacred to him. On Sunday the devotees do not eat salt; nor do they set milk for ghee, but

1. Elliot and Dowson, *The History of India As Told By Its Own Historians*, Volume II, 1869 (London), p. 454.

2. The image of Trivikrama Vishnu in this temple was recovered from Siwan. (R.C. Majumdar, *The History and Culture of the Indian People*, Volume IV, *The Age of Imperial Kanauj*, 1964, p. 336). See also Chapter on 'Places of Interest'.

make it into rice-milk, of which a part is given to the Brahmans in honour of the Sun; and a lamp is always lighted for him on Sunday. Water is thrown towards the Sun (*argh*)¹; and with first steps out of doors in the morning, the devotee salutes the Sun, and says *dharm ko sahai rakhya suraj maharaj* (Keep me in the faith O' Lord, the Sun !). The Brahmans take the offerings.

The *Mahabharata* refers to the popularity of Sun cult in the Kurukshetra tract. It is believed that Aditi had given birth to Surya at Suraj Kund situated at Amin, about five miles (eight kilometres) from Thanesar. There still exists a temple of Aditi and a Suraj Kund near by. During the eclipse of the sun, millions of people assemble at Kurukshetra in order to bathe in the holy Kurukshetra Tank.

The Yamuna.—The people refer to river Yamuna as Jamna Ji. There are no shrines to the Yamuna; but people go and bathe in the river on the occasion of *Sankrants* in the months of Chaitra and Kartika and on 15th of Kartika or every day in that month. Likewise, the other rivers are also held sacred.

Bhumia or the god of the homestead.—Bhumia or the god of the homestead or the village itself, often called Khera is the most important. Bhumia is worshipped on Sunday. People light up a lamp and offer a cake of bread at the shrine, and feed the Brahmans. This is always done twice a year, after the harvests are gathered in, and also on other occasions. Bhumia is also worshipped at marriages. The bridegroom before proceeding to the bride's house, takes a round of his own village and worships the Bhumia and he again worships the god before he can enter his house along with his bride. When a woman has had a son, she lights lamps, and affixes with cowdung five culms of the *panni* grass called *bearn* to the shrine. So too the first milk of a cow or buffalo is always offered to Bhumia. Women commonly take their children to worship Bhumia on Sunday. The Brahmans take the offerings.

Khwaja Khizr.—The worship of the local god of water, though the name is Muslim, is prevalent more in the *Khadar* than in the *Bangar*, and especially on Sundays. Twice a year after the harvests, he is worshipped at the well, lamps being lighted and Brahmans fed. And on the festivals of Holi and Diwali, a raft called *langri* is made of the *bearn* just mentioned, and a lighted lamp is put on it and set afloat on the tank in his honour. The Brahmans take the offerings to Khwaja Khizr, though they are occasionally given to the water-carrier or *jhinwar*.

1. This is done to the new moon too on the evening of her appearance.

In addition to the worship of these deities the benevolent deities such as Pitr and Satis are also worshipped in various forms.

Smallpox Sisters.—The pustular group of diseases is supposed to be caused by a band of seven sisters of whom Sitala or Mata, the goddess of smallpox, is the greatest and most virulent. There are important shrines to these deities at Pathri, Kabri, Baholi (tahsil Panipat) and Siwan (tahsil Gula). These are never worshipped by men but only by women and children of both sexes up to the age of 10 or 12. Enormous crowds collect at these shrines on the 7th of Chaitra which is called *Sili Saten*. Besides this, Phag, the day after the Holi festival, and any Monday, especially in Chaitra or Asadha, are favourable days.

During an attack of the smallpox no offerings are made; and if the epidemic has once seized upon a village, all offerings are discontinued till the disease has disappeared, otherwise the evil influence would spread. But, so long as Mata keeps her hands off, nothing is too good for the goddess, for she is one of the great dreads of Indian mothers. The dread is based upon the high incidence of deaths caused by the disease, but with increased facilities with regard to vaccination, a material reduction in the annual mortality has been brought about. The disease has not so far been completely eradicated and people still have undiminished faith in the smallpox goddess.

The fairies are a somewhat vaguely defined class of malevolent spirits and with the spread of education, the fairies are considered nothing but the product of superstitions.

Gugga Pir.—Gugga or Jahar Pir, though a Muslim, is supposed to be the greatest of the snake-kings. Gugga is worshipped throughout. The 9th and 15th of Bhadra, especially the former, considered as Gugga Naumi, are dedicated to this Pir, and generally the 9th of any month and all Mondays are his days. His shrine usually consists of a small one-room building with a minaret on each corner and a grave inside. It is called a *mari* and is marked by a long bamboo with peacock plumes, a coconut, some coloured threads, and some hand-*pankhas* and a blue flag on the top. On the 9th of Bhadra the Jogis take this fly-flap known as *chhari* round the village to the sound of *deroos* and the devotees salute it and offer *churmas*. The Balmikis sing devotional songs known as 'Pir Ke Solle' in honour of the Pir to the accompaniment of *deroos*. Beating of *deroos* is the exclusive privilege of the Balmiki community; others may partake in singing, dancing or simply offer *charhawa*. It is believed that the spirit of Gugga temporarily takes abode in the devotee dancer who proves this fact by beating himself

occasionally with a bunch of iron chains called *chabuk*. The important *maris* of Gugga are at Pundri (tahsil Karnal), Ladwa (tahsil Thanesar), Asan Kalan and Mandi (tahsil Panipat).

Gugga Pir is also the subject of folk-songs. Songs to him are sung on the occasion of child-birth and marriage.

Sayyads.—In villages, there are many old shrines built in honour of mythical Sayyads. According to the Karnal District Gazetteer of 1918, even the names of the Sayyads were not sometimes known. People used to worship at these shrines, but this habit has weakened over the years and particularly with the migration of Muslims and the incoming of people from Pakistan for whom such traditional shrines had little meaning.

Minor saints.—There are innumerable local saints; many villages having shrines to names never heard of elsewhere. A few of the most celebrated are Miran Sahib, Lakhdatta or Sakhi Sarwar, Bawa Farid Shakarganj and Bauli Shah Qalander. Among these, the last named, a contemporary of Bawa Farid,¹ is a very celebrated local saint. He is supposed to have been born in A.D. 1190. The saint died at the age of 122 years in A.D. 1312. He used to ride about on a wall at Budha Khera, a village about three miles (five kilometres) from Karnal, but eventually settled at Panipat. Besides two shrines, one each at Panipat and Karnal, there is a shrine to him at Budha Khera built over the wall on which he used to ride.²

Arya Samaj.—It was founded in the district in 1885. It attacked the worn out and old established religious practices, the meaningless rites and ceremonies of the Hindus. The movement spread rapidly to the rural areas. But the Arya Samaj has begun to lose its former hold for want of vigour and enthusiasm in its preachers. It has, however, done a wonderful job in spreading education, specially among the women, by opening a number of schools and colleges. Uplift of Harijans, widow marriage, eradication of illogical and orthodox beliefs, protection of cows and propagation of Hindi are some of the other activities of the Arya Samaj.

1. There is a shrine of Bawa Farid at Goripur (tahsil Thanesar).

2. Tradition has it that he died at Budha Khera and there was a good deal of trouble about burying him. He was buried at Karnal but the Panipat people opened his grave upon which he sat up and looked at them till they felt ashamed. They then took away some bricks from the grave for the foundation of the shrine; but when they got to Panipat and opened the box, they found his body in it; so he now lies buried both at Panipat and Karnal.

Sikhs .—The Sikhs constitute 11.9 per cent of the total population of the district and form the second largest religious group. They are composed of mostly Jat Sikhs and Mazhbi Sikhs. The majority among Jat Sikhs comprise Virks while others include Sandhus, Chattas, Cheemas, Bhatias and Gills. The Sikhs are generally scattered in rural areas as is evident from the table given below :

District/Tahsil		Number		
		Males	Females	Total
Karnal district	Urban	13,062	11,265	24,327
	Rural	80,907	72,368	1,53,275
	Total :	93,969	83,633	1,77,602
Karnal tahsil	Rural	21,023	18,236	39,259
Panipat tahsil	Rural	2,131	1,860	3,991
Thanesar tahsil	Rural	20,175	19,780	39,955
Kaithal tahsil (including Gula)	Rural	37,578	32,492	70,070

The Sikh Gurus enjoined the worship of one supreme God. The devotees visit *gurdwaras* where verses from the holy scripture (the *Granth Sahib*) are recited. Besides observing some Hindu festivals, the Sikhs celebrate *Gurpurbs* (birthdays and martyrdom days of the Sikh Gurus) and Baisakhi which marks the birth of the *Khalsa*. *Akhand path* is sometimes organised either in thanksgiving for the fulfilment of a desire or on the occasion of birth, marriage and death. None must appear bare-headed before the *Granth Sahib*. Gurdwara Mastgarh at Shahabad (Shahbad), Gurdwara Thanesar and Gurdwara Tirawari (Taraori) are held in high esteem.

Muslims.—The Muslims are now very few in number. At the time of 1941 Census they counted 3,04,346 forming 30.6 per cent of the population. In the wake of the Partition almost all of them migrated to Pakistan and in their place 2,50,471 non-Muslims migrating from Pakistan settled in this district. Although accurate statistics are not available, it is estimated that 3,00,688 Muslims comprising Afghans, Baluches, Muslim Rajputs, Sayyids, Gujars

1. *Karnal District Census Handbook*, 1951, p. 12. This number decreased to 2,14,116 according to the 1961 Census apparently because some displaced persons shifted to other places outside the district during this decade.

and Sheikhs, migrated from this district to Pakistan. According to the 1961 Census, the Muslims numbered 14,159 being only 1 per cent of the total population of the district. Their distribution is exhibited below :

District/Tahsil		Number		
		Males	Females	Total
Karnal district	Urban	862	160	1,022
	Rural	7,507	5,630	13,137
	Total :	8,369	5,790	14,159
Karnal tahsil	Rural	2,548	1,914	4,462
Panipat tahsil	Rural	2,230	1,690	3,920
Thanesar tahsil	Rural	1,621	1,122	2,743
Kaithal tahsil (including Gula)	Rural	1,108	904	2,012

Evidently, the majority of the Muslim population live in rural areas. There are hardly any Shias amongst them. They are mostly farmers or cultivators depending on agriculture. A few engage themselves as petty shopkeepers or as padlars who roam from village to village selling their merchandise, cloth or utensils. Some are job workers in towns.

As elsewhere in the country, there is no religious restriction of any kind on the Muslims. Two schools, one in Jama Masjid, Karnal and the other at Panipat, impart Muslim religious instruction. The festivals of Id and Baqrid are celebrated with enthusiasm. The Muslims from rural areas flock to Karnal, Panipat and Kaithal on these occasions for offering mass prayers. The Muslims from other parts of the country come to Panipat, the birth place of the Muslim poet, Hali, to celebrate the Urs.

Marriage among the Muslims is contracted with the usual Nikah ceremony performed by a Maulvi. The Muslim Rajputs may marry their sons and daughters among the Muslim Rajputs residing in the adjoining State of Uttar Pradesh. The others, e.g. carpenters and blacksmiths, prefer their own *biradari* within the district.

A Muslim's dress comprises a *lungi* or *tehmat*, shirt, jacket and turban or Gandhi cap or round cap. A woman generally wears a *salwar*, shirt and *dupatta*. *Burkah* is rarely seen.

Jains and Christians.—The Jains and the Christians form a small minority. The Jains practice the teaching propounded by Lord Mahavira. They worship the images of *Tirthankaras*.

The appearance of Christianity in the district dates back to the time of Akbar when he allowed the Roman Catholic missionaries to preach their religion in his empire. Anyhow, it was only during the British period that some tangible effort was made to build churches at Karnal and Kaithal. A church, called the St. James' Church, was erected at Karnal in 1806, but with the removal of the cantonment to Ambala the building was dismantled and the material removed to Ambala in 1843. A church at Karnal, which was completed in 1905, serves the protestant Christian community of the district. It functions under the management of the Churches of India, Burma, Pakistan and Ceylon with its headquarters at Calcutta. In 1960, the Catholic Mission was re-organised, two Churches, one each at Habri and Panipat, were built and the Mission also started a convent school at Karnal.

SUPERSTITIONS

Some superstitions and omens commonly observed in other parts of India are also observed by the masses of the Karnal district. A few are, however, peculiar to this district. Odd numbers are usually regarded as lucky but 3 and 13 are unlucky. To sneeze is considered auspicious, as it is an omen for a long life. So, when a man sneezes his friends become great enthusiastic and congratulate him saying *satan jib* (live a hundred years). A villager will not eat when a black sesame is formally offered to him by anyone for, if he does, he will have to serve him in the next life. Thus, if one asks any other to do something for him, the latter will reply : '*Kya main ne tere kale til chabe hain ?* (Have I eaten your black sesame ?)

The present day common superstitions relate to the ill effect of an evil eye. No new activity is started if someone sneezes before it is due to be started. While going out on an auspicious work, it is generally considered inauspicious to come across a Brahman, a bundle of firewood or a black cat going across the path. Coming across a low caste is, however, considered auspicious. People still believe in the cure of leprosy by bathing regularly in the holy tank at Pehowa. The delivery is considered easier when village Amin's (tahsil Karnal) old-brick wash is administered to an expectant mother. It is believed by the people living in villages on the bank of the Markanda stream that if an old and respected villager worships the stream bare-footed and offers a rupee, the flood would recede.

FESTIVALS AND FAIRS

The common festivals celebrated by the Hindus are Holi, Janam Ashtami, Dussehra and Diwali. The minor festivals are Shivratri, Gugga Naumi, Solono (Raksha Bandhan) and Bhaiya Duj. Among the many fairs held in the district, the more important which are attended by lakhs of persons from all over India are Kurukshetra, Pehowa and Phalgu fairs. Baisakhi, Mela Bhagwati Bala Sundri and Bawan Dwadashi are of local importance.

The principal festivals are celebrated by the Hindus here as in other parts of the country. It is, therefore, not necessary to give a detailed account of their observance except when there is something distinctive or peculiar to this district in the celebration of any of them. For example, people of Naultha (tahsil Panipat) celebrate Holi somewhat differently. Half naked groups of men drenched with coloured water start from different lanes and meet one another. Each group tries to push the other group with naked chests, keeping their hands up, till one of the groups is overpowered. This contest is called *dat*. All the groups, then, come to *chopal*, dancing, jumping and skipping. Coloured water is thrown over them from the roofs of the houses. Another feature is that one of the youngmen jumps from the house top on the marching groups below. He is caught in arms by the revellers and is not allowed to fall down on the ground. In village Agaundh (tahsil Gula), Holi is celebrated as Mela Mandir Baba Lalpuri.

Shivratri.—It literally means the night consecrated to Shiva who is one of the three gods of the Hindu Trinity. Shivratri is a special occasion for the worship of Shiva; a fast on the fourteenth day of the dark fortnight of the lunar month of Phalguna, and worshipping Shiva at night, either in the house or in a temple. The women worship by pouring water containing a few rice grains on *Shivalinga*; the men celebrate by holding wrestling matches. Celebrations are held at Baraut¹, Asandh (tahsil Kaithal), Bhor (tahsil Gula), Ram Saran Mazra, Patti Kankra Shahabad, Urnai, Bapa, Khairi, Pipli, Umri, Shahabad (Shahbad) (tahsil Thanesar), Barauta, Dadupur Khalsa, Karnal (tahsil Karnal) and Bhadaur (tahsil Panipat).

1. There is a legend behind the celebration of Mela Shivji (Shivratri) at Baraut. It is said that a Muslim was once digging a grave to bury a corpse. His spade struck against a stone and blood and milk gushed out of it. When the news of this strange happening went round the village, the Hindus claimed the stone to be an idol of Shiva. A compromise was arrived at between the Hindus and Muslims and the place was entrusted to the Hindus. The idol of Shiva was taken out and installed in a temple constructed there. It is worshipped and a fair is held. Cuts caused by the spade can still be seen on the idol.

Gugga Naumi.—It is a religious festival connected with snake worship observed on Bhadra 9 (August-September). A number of legends have clustered around Gugga. He is also called Gugga Pir, Zahir Pir (the Saint Apparent). Some refer to him as Bagarwala (He of the Bagar) because of his grave near Dadrewa (Ganganagar district of Rajasthan) in the Bagar tract which he is said to have ruled over. He flourished about the middle of the 12th century. He was a Hindu and his proper name is Gugga Bir (Gugga, the Hero). The Muslims also flock to his shrine and his name has been altered to Gugga Pir (Gugga Saint), while in the opinion of many, he himself became a Muslim. Gugga had a peculiar power of curing snake bite. Monday is his day, the 9th is his date and Bhadon 9th the date on which Gugga descended into earth. To commemorate this event, fairs are held on his shrine every year on this date. Those who do not attend the fair go out in search of holes that might contain some snake and pour on it *kachchi-lassi* (diluted milk) and *sewian* (cooked vermicelli).

Gugga Pir's shrine is distinguished by its square shape with minarets and domed roof and is always known as a *mari*. Some of the places where this festival is celebrated in the Karnal district are Pehowa (tahsil Gula), Pundri, Kaithal (tahsil Kaithal), Jathlana, Badarpur, Buhawi, Bhartauli, Shahabad (Shahbad), Ladwa, Radaur (tahsil Thanesar), Santhri, Zainpur Sadhan, Gadhi Jatan, Amunpur Khalsa, Pundri Taraori Jagir, Padhana (tahsil Karnal), Asan Khurd, Asan Kalan, Kurana and Mandi (tahsil Panipat).

Kurukshetra fair.—Kurukshetra is an important place of pilgrimage for the Hindus all over India. Whenever the solar eclipse occurs, there is a congregation of about five lakh devotees from all over the country. Similarly, at the time of lunar eclipse, there is a gathering of about one lakh people. The mode of observance of this religious fair includes a dip in the holy tanks, *viz.* Brahmasar or Kurukshetra tank and Sannihati tank at the time of eclipse,¹ giving alms and charities, visiting various shrines and temples and

It is believed that on the *amavas* (moonless night) and during the period of eclipse, all *tirthas* assemble at Sannihati tank and by performing *shraddhas* and taking a dip in the tank at the time of solar eclipse one acquires the fruits of *ashvamedha yajna* and is absolved of all previous sins. According to another legend, one of the fingers of an ancestor of Kauravas and Pandavas was deformed. As chance would have it, it got smeared with the soil of this place and became all right. Keeping in view this purifying and healing effect of the soil, the Kauravas and Pandavas constructed a tank which is regarded sacred. A dip in the tank is believed to relieve one of all diseases.

doing obeisance to the deities. Religious books are recited, *bhajans* are sung, *kirtans* are held and *shraddhas* of ancestors are performed. In more recent times cinema and circus shows, and wrestling and *kabaddi* matches have been added.

Phalgu fair.—Kurukshetra fair, described earlier, and Phalgu fair, held in honour of a *rishi* of this name mentioned in the *Mahabharata*, are two of the biggest fairs. Both of these attract very large crowds.

The fair is held at Pharal, ten kilometres from Pundri town in the Kaithal tahsil. Like the Kurukshetra fair it is celebrated at a place which does not normally have the usual town facilities. Another point of similarity between the two fairs is that they are not annual features : Kurukshetra fair is held on the solar eclipse and Phalgu fair is held when the *amavas* (moonless night) during the *shraddhas* occurs on a Monday. The last Kurukshetra fair was held in 1961 and the next will take place after 12 years.

The number of visitors from all over the country including a sizeable proportion of women approximates over three lakhs. They are mostly Hindus and some are Sikhs. The fair which lasts for fifteen days is held whenever a *somavati amavas* falls during the dark half of Asuj. The site of the fair is the holy tank adjoining the Phalgu village. It is considered sacred to perform here the *shraddhas* of ancestors on such *somavati amavas*. The Pandavas also performed the *shraddhas* of their ancestors at this place. The mode of observance of this religious fair includes a bath in the tank and offering of *pindas* and *shraddhas* in the name of ancestors. Cinema and circus shows, dramatic performances, etc., provide entertainment.

Pehowa fair.—Known as mela Chet Chaudash, it is a fair of great religious significance for the Hindus. It is celebrated in Pehowa town which is at a distance of 27 kilometres from Kurukshetra. The fair is celebrated for three days on Chaitra Badi 13 to 15 (March-April) but the main sanctity is attached to the night between the 14th and 15th of the dark half of the lunar month. It is held annually but gets added significance if the Chaitra *amavas* (moonless night) recurs on a Monday which is regarded as very auspicious. People from far-off places come here to take bath in the holy Saraswati, regarded as the river of knowledge. The last rites of those persons who die an abnormal death resulting from an accident, and of those who breathe their last in their beds and not over the ground are performed here. It is believed that the departed ones whose spirits are not at peace get *mukti* (salvation) if the necessary religious ceremonies are performed at this place. A Hindu therefore

considers it his sacred duty to visit Pehowa to perform the last rites of those of his ancestors and relatives who die under abnormal circumstances.

The fair is attended by more than one lakh pilgrims including a fair proportion of women. Hindus and Sikhs are the principal participants though visitors from other communities are also there. All age-groups are represented. The visitors observe this fair by having a sacred bath in the pond constructed at the confluence of Saraswati and Markanda and by offering of *pindas* in the name of ancestors and giving charities. As elsewhere, *bhajans* and *kirtans* are organised, wrestling and kabaddi matches are played, circus and cinema shows and exhibitions are held for the entertainment of visitors.

Baisakhi.—It is a seasonal and religious fair celebrated on Vaisakha 1 (April 13) every year by both Hindus and Sikhs at Panipat Tarf Ansar (tahsil Panipat), Mangna (tahsil Kaithal), Karnal and Pujam (tahsil Karnal). At Garhi Nazir (tahsil Gula) it is also called mela Guru Teg Bahadur in whose honour there also stands a *gurdwara*. Baisakhi celebrated at village Diyalpur (tahsil Thanesar) has a different significance. The legend goes that it was here on this day that Arjuna shot an arrow into the earth and the water of the Ganga gushed forth. Thus, Bhishma took water and quenched his thirst.

Mela Bhagwati Bala Sundri.—It is a religious fair held on Chaitra Sudi 7 (March-April) at Dehrah and Shahabad (Shahbad) (tahsil Thanesar). At Dehrah it is called Mela Devi Bala Sundri or Devi Bhawani. The devotees worship the deity and make many kinds of offerings in the shape of cash, clothes and ornaments. It is attended by both Hindus and Sikhs.

Bawan Dwadashi.—A religious festival, it is dedicated to Bawana, an incarnation of Vishnu. The festival falls on Bhadra Sudi 12 (August-September). At Thanesar, palanquins carrying the images of deities are taken out in the form of a procession. The people bathe in the sacred tank. At Ladwa, however, the palanquin carrying the image of Bawana after having been taken through the city in the form of a procession is carried across Rama Kundi tank in a boat. At both the places the festival is attended by several thousand people. Village Jatfana is another place in the Thanesar tahsil where this festival is celebrated. At Kaithal, a fair is held at the temple of Saru Dev.

A few relevant details of other fairs and festivals celebrated in the district are given in Table VIII of Appendix.

SOCIAL LIFE

SOCIAL GROUPS

The important social groups are Jats, Rors, Rajputs, Gujars, Tagas, Marathas, Virks, Khattris, Aroras and Brahmans. The latter four comprise the displaced population from Pakistan, who settled in the district as a consequence of the Partition in 1947. Jats, Rors, Rajputs, Khattris and Virks form the agricultural backbone of the district.

Jats.—Jats who are pre-eminently the agricultural caste of the tract, are very good cultivators. A Jat, when asked his caste, will as often answer 'Zamindar' as 'Jat'. They are a fine stalwart race. They seem to have held parts of the country about Samana in very early days as part of an early Indo-Scythian kingdom.¹ The principal clans of the Jats are Jaglan, Ghamghas, Gatwal or Malak, Deswal, Katkhar or Gahlaur, Sandhu and Halawat. Although scattered all over the district, they are predominantly found in the rural areas of the Kaithal tahsil followed by the Karnal and Panipat tahsils. They are all Hindus. Those who had become Muslims were called Mule Jats. They were found in two or three villages and migrated to Pakistan at the time of the Partition.

Rors.—Rors, a stalwart people, are mostly inhabited in the rural areas of the Karnal tahsil followed by the Kaithal and Panipat tahsils. They are almost as good cultivators as the Jats, and are assisted by their women in the same way yet are much more peaceful and less grasping in their habits.

Rajputs.—They are fine brave men, and still retain the feudal instinct. As agriculturists they maintain the integrity of their communal property in the village land and pursue cattle rearing in addition to agriculture as a profession. In rural areas they are concentrated in the Karnal tahsil followed by the Kaithal tahsil. Rajputs from Nardak area join the armed forces in large numbers.

Muslim Rajputs, who left for Pakistan following the Partition, were called Ranghars by other castes, and Chotikats₂ by their Hindu brethren.

1. "The Jats of the district seem to have come partly from the Bagar, where they were in force 700 years ago. In no case have Jats settled from across the Jumna (Yamuna). The Jats are not mentioned as a prominent caste of the tract in Akbar's time, and probably gained a footing during the breaking up of the Mughal dynasty, when they became an important element in the politics of the time." (*Karnal District Gazetteer*, 1918, p. 92.)

2. From *choti*, the Hindu scalp-lock which the converts to Islam were not required to keep.

Gujars.—The principal clans of Gujars are Rawal, Chokar, Chamain and Kalsan and are mostly concentrated in the rural areas of the Panipat and Kaithal tahsils. Generally of good physique they devote most of their energies to cattle keeping, but are known to be indifferent cultivators.

Tagas.—Tagas are a Brahman caste which has abandoned the priestly profession and adopted agriculture. This community is mostly found in the rural areas of the Kaithal tahsil. They are all Gaurs. They are the oldest inhabitants and are good cultivators. Their women are strictly secluded.

Marathas.—Rose in his glossary speaks of Marathas in the Punjab as a group of Brahmans, a relic of the Maratha supremacy.¹ After the Third Battle of Panipat, the Maratha settlers spread over the whole of the Punjab, and in the Karnal district they settled at Kaithal, Karnal, Shahabad (Shahbad) and Panipat.

Virks.—Virk Jats who with their farming skill have greatly strengthened the agricultural economy of the district, are displaced persons from Pakistan and have mostly settled in the rural areas of the Karnal, Kaithal and Thanesar tahsils. They held large contiguous blocks of villages in Shekhupura and Gujranwala² districts (Pakistan). Virks among the Sikhs are the best cultivators. They have put in hard labour to bring the jungles and virgin lands under plough, obviously to achieve the standard of living enjoyed by them in their homeland. They have almost modernised their farms. The local zamindars have been influenced by the superior skill and cultivation techniques of these immigrant cultivators and have considerably gained from their experience.

Khattris, Aroras and Brahmans.—These main castes of non-cultivators migrated into the district from Gujranwala, Multan and Muzaffargarh districts of West Punjab (Pakistan). The Khattris and Aroras have mostly settled

1. H.A. Rose, *A Glossary Of The Tribes And Castes Of The Punjab And North-West Frontier Province*, Volume III, 1914 (Lahore), p. 48.

2. *Gujranwala District Gazetteer, 1893-94*, (pages 58-9), describes thus their qualities as men and as cultivators: "They are mainly Sikhs, in the Bar* nearly always so, and physically are a fine athletic manly race far surpassing in energy and industry any of their Muhammadan neighbours. They are first-rate cultivators, though in the Bar* they have taken to agriculture only under our (British) rule, their hereditary profession being arms or theft. Their villages are prosperous, well developed and usually free from debt. Like most Jat Sikhs, they combine the love of adventure with the love of gain, and are generally to the fore where money is to be made or where hard knocks are going."

(*Sand-dunes with low elevation, of local importance)

in the urban areas. However, they are also found in large numbers in the rural areas of the Thanesar and Karnal tahsils; Khattris predominate in the Thanesar tahsil while Aroras in the Karnal tahsil. These communities are known for their intelligence, enterprise and good looks. They have regular features, a straight Aryan nose, and a light complexion. Their women are known for beauty and grace. They are very sharp business-men, worldly-wise and money-minded. Wherever they have gone, they have made a mark and carved a comfortable place for themselves in the local economy. Even in other States they have flourished and invariably outshone their rivals. Whenever they apply themselves to agriculture, they prove themselves to be a force for progress and modernisation of farming methods.

Khattris and Aroras functioned as traders, shopkeepers and bankers in West Punjab (Pakistan). For a successful prosecution of these professions and for reasons of security, they lived in towns or large villages. Their work did not involve any manual labour but, deprived of their easy way of making money due to the Partition, they have now changed their economy and have increasingly drifted into the rank of workers. Their resettlement in the stagnant towns of Punjab and Haryana has quickened the pulse of social life. Drab bazaars, with ill-kept shops, have completely changed, and instead we find well-stocked orderly shops with a large variety of goods. The townsmen here were socially backward, and their women purdah-ridden. The displaced shopkeepers have penetrated isolated villages where bananas and oranges can now be had. They have greatly increased the circulation of goods even in villages inhabited by the parsimonious country folk. The local residents have adopted fruits in their diet. Fruit shops are found in much larger number in all the towns and meat as an article of diet is finding increasing popularity with the erstwhile altogether vegetarian population. The culture of West Punjab had a liberalising influence on the local women, who emulating the example of their sisters from the Pakistan, have discarded purdah and escaped from the prisons of their homes, and now *bahujis* (wives) can also be seen elegantly dressed promenading the streets.¹

The majority of the population living in villages, continue to be conservative, in the matter of inter-religious groups marriages. In towns, however, inter-caste marriages do occur although rarely. Speaking generally, the social relations among the different communities are not coloured by religious differences.

1. M.S. Randhawa, *Out of the Ashes*, 1954, pp. 218-19.

JOINT FAMILY SYSTEM

The family is locally known as *kunba*. A group of families having common ancestors is called *thula*. Two or more *thulas* are jointly called *pana* or *patti*. It is common for several brothers, and occasionally for cousins to live together and farm the land jointly. More often the land is managed jointly while the owners live separately. The most important characteristic of the joint family system is that the income of all its members is pooled and spent for the benefit of all the members, whether or not they have actually earned any part of it. The basis for the system is to insure maintenance of all descended from a common ancestor, father or grandfather or great-grandfather. The widows or orphans, the children, young boys and girls and elderly or decrepit or physically incapacitated members of the family, all receive the attention of the head of family and are supported and maintained out of the joint family funds.

The joint family system which has been a distinguishing feature of Hindu society since time immemorial, is breaking up under the stress of the changed economic and social conditions. Various factors are responsible for this change. The competition for earning a living, the tax-structure, the increased cost of living, the mobility resulting from the requirements of service and, above all, the growing spirit of individualism, all these features spell the doom of this ancient institution. It is no longer possible for one earning member of a family to feed and support a host of relations and dependents. Even in the family where every member is an earning hand, it seems difficult to make both ends meet. Another factor which has assisted in the dissolution of the system is the growing tendency of late marriages both for boys and girls. When boys and girls marry at a comparatively advanced age, they prefer to live independently. A new pattern, with an individualistic bias, is steadily emerging. Usually the branch of the family which earns more money separates from the poorer branch. Those who enter service, have naturally to go wherever they are posted and they can hardly uproot the headquarters of the joint family and move it with them from place to place according to the exigencies of service.

While the position is more marked in urban areas, the joint family system is disappearing even in the villages, where people depend almost entirely on agriculture. The average holding is too small to support a joint family which continues growing in size with the birth of each new baby in the family. It is therefore inevitable that some members of the family should move out in search of service to the towns or elsewhere to supplement the meagre family income. In this way the migration of rural population to the

cities in search of a living — whether in business, industry, service or some form of labour—has vitally affected the structure of the joint family. Those who migrate to the towns get allured to modern amenities of life and try to settle down there with their families, and leave the farm to those members of the family who stay behind in the village. A village youth moving to town, after a while gets so attuned to urban way of living that he dislikes the thought of going back. Even the trend of latest legislation on inheritance has hardly been conducive to the continuance of the joint family system.

INHERITANCE

The law of inheritance prevailing in the past, as given on pages 135—37 of the *Karnal District Gazetteer*, 1892, was as follows :—

“The land owned in severalty by individual families is not only inherited, but is also invariably divided on the occasion of separation of property in strict accordance with ancestral shares. The members of the family often divide the land among themselves for convenience of cultivation more in accordance with the appliances at the disposal of each than with the proprietary shares, just as the common land is allotted to the various families on a similar scale. But this division is not a division of property, and the right of the members to a re-distribution according to shares, with due regard to the preferential right of each to the land he has cultivated, so long as it does not exceed his share, is always recognised by the people, though sometimes (not often) contested by the individuals concerned. सत्यमेव जयते

“The rules of inheritance are as follows :—No practical distinction whatever is made between divided and undivided families; in fact, the terms are hardly ever used.¹ First the sons and sons’ sons by stirpes how low soever succeed, sons representing their dead fathers. In the absence of them, the widow takes an interest strictly limited to a life tenancy. If there is no widow, or after her death, the brothers and brothers’ sons how low soever inherit by stirpes with representation. In their absence the mother

1. Ibbetson writes : “I need hardly say that all my remarks refer solely to the land-owning castes, and not to Banias and the like. They also do not apply to the original Musalmans, who usually follow the Muhammadan Law. Moreover, in these matters I only give the general customs. Particular exceptions, though far less numerous than might be expected, will be found recorded in the record of common customs.”

I have added some notes. See also the volume relating to *pargana* Indri and *tahsil* Kaithal in the series devoted to the Customary Law of the Punjab.—J.M. Douie.

takes a life interest.¹ After these the inheritance goes to the nearest branch in the male line, the division at each stage being by stirpes. Daughters, if unmarried, have a claim to maintenance only.² If property is separately acquired by a son in a divided family during his father's life, the father inherits before the brother; but separation of interest before the father's death is not allowed, and no separate property can be acquired by the individuals of an undivided family. The father may divide the land for convenience of cultivation; but on his death, or the birth of another son, it will be open to re-distribution.

"In attesting the record of common customs the whole countryside has declared that, where there are three sons by one wife and one by another, all four share equally (*pagvand*). But there have undoubtedly occurred instances in certain families, especially among the Rajputs of the Nardak, where the division has been by wives (*chundavand*). Where *chundavand* is the rule of division, the full brothers and their representatives succeed to the exclusion of the half-blood; otherwise there is no distinction between the two.³ All sons, whether by original marriage or re-marriage (*karewa*), are on an equal footing; no priority is attachable to the sons of any particular wife. But if a Rajput Musalman should marry a woman of another caste, as they sometimes do, especially in the cities, the sons do not inherit at all, the property going strictly in the tribe.

"A son born less than seven months after the marriage is consummated, even though begotten by the husband, and one born more than ten months after death or departure of the husband, is illegitimate. An illegitimate son cannot be legitimised, nor can he inherit.⁴ A son by a former husband

1. There is some disposition among certain tribes to say that the mother should succeed along with the son's widow or even along with the widow. It is founded on the feeling that the older woman would be less likely to mismanage, and finally attempt to part with, the land.—J.M. Douie.

2. It may be taken as a rule that the spindle side is debarred from inheritance under all circumstances, at least as long as there is any male collateral however distant.—J.M. Douie.

3. I think there is evidence to shew that *chundavand* was more common formerly than it is now. It is found to some extent among Jat Sikhs, who came originally from the Punjab.—J.M. Douie.

4. The answer you are likely to get in questions about illegitimacy is that no case of an illegitimate son being born in the tribe was ever heard of, and illicit relations between men and unmarried women of the same tribe and *got*, being regarded as incest, are probably very rare.—J.M. Douie.

brought with her by a woman on her re-marriage, who is called *gelar*¹ (*gel* together with) if born, and *karewa* if unborn at the time of the re-marriage, inherits as the son of his begetter. A member of the family who becomes a monk (*sadhu*) loses his inheritance; but does not do so merely by becoming a beggar (*fakir*).² But the disciples of monks inherit from them as their sons. The life interest of widows subsist so long as one is alive, and is shared by all equally. But a Musalman widow of another caste has no interest; and a widow who re-marries loses all rights even if she marries the husband's brother. Pregnancy also destroys their rights; but not mere reputed unchastity. Their rights are not contingent upon their living in the husband's village. Woman's separate property (*stridhan*) is unknown. It is remarkable how wholly, in the minds of the people, the family is represented by its head. At the Regular Settlement the name of the head only was recorded as a rule; and the people still think that it is quite sufficient to send their heads to represent them in court or elsewhere. This feeling, however, is weaker among the Jats than among other tribes; and they have become notorious in consequence."

Now, according to the Hindu Succession Act, 1956, sons and daughters, the mother and the widow along with other heirs³ of the deceased, if any, inherit the intestate property simultaneously. A daughter has as good a claim to her father's property as a son, provided the father does not debar her by law. However, in spite of the right conferred by law, it appears to have become a general practice for the girls not to claim any part of the intestate property. In the absence of a brother, a girl may some time give her land to her near relatives, though in such cases she usually retains her right to property. In a few cases suits have been instituted by daughters who have been denied their share in the intestate property. But the sentiments of society did neither welcome nor encourage such cases. Rather there is resentment against this particular portion of the new legislation.

MARRIAGE CUSTOMS AND MORALS

The Vedic system of marriage in essence prevails among the Hindus. It is treated as sacred and is governed by traditional customs. As elsewhere, the marriage dates are mostly determined by astrological considerations.

1. Or *Gadhela*,—J.M. Douie.

2. There is no doubt that a man who becomes a Hindu ascetic loses his rights of property. The rule is less positive as regards Musalman *fakirs*.—J.M. Douie.

3. Specified in Class I of the Schedule vide Section 8 of the Hindu Succession Act, 1956.

Marriage is an important event of one's life; it is preceded by betrothal and a number of preliminaries and elaborate preparations.

Betrothal.—Betrothal is called *nata*, the ceremony *sagai*. The brother of the girl or one of the close relatives (previously village barber or Brahman used to perform such functions) goes to the boy's place. If the offer is accepted and the result of the detailed discussion is satisfactory, the *nata* is settled. After this, he puts some money into the boy's hand. This is called *rokna* or *tikka*. This, however, is not a necessary preliminary.

After *rokna* the next ceremony to be performed is betrothal (*sagai*), when presents of money and gifts are given by the girl's parents to the boy and his relatives. In the years gone by no relation of the girl would take any part in the betrothal ceremony, but now the girl's father and near relations do take part in it. In most cases now *rokna* and *sagai* are performed at one and the same time.

Marriage preliminaries.—A day before the marriage, the maternal uncle of the boy or girl brings the *bhat*. This consists of presents and necessarily includes the wedding suit for the bride or bridegroom. The people on the boy's side then get together and *neota* is collected.

Wedding.—On the day when the *baraat* is to start, the boy is dressed in his wedding suit brought by his maternal uncle. The *kangna* or seven-knotted sacred thread is tied on his right wrist. His head-dress consists of a crown or crest over the turban, and a *sehra* covering the face.

The ceremony of *ghurchari* is then performed. The barber leads the decorated mare with the bridegroom on its back, while women follow along singing songs peculiar to the occasion and the mother or aunt or an elderly woman with a utensil containing water. His sister puts her wrap over her right hand, and on it places rice which she flings at his crown as the bridegroom goes along. He goes and worships the god of the homestead. Thereafter the *baraat*, usually comprising the relatives and friends, starts with music of sorts. In some castes, *ghurchari* is performed a day earlier.

If both the parties reside in the same place which frequently happens in a town, no managements for the residence of the *baraat* are necessary. If, on the other hand, the *baraat* comes from an out-station, it is received by the bride's side usually at the railway station in the case of a town or on the outskirts of the village from where the party is taken, sometimes in procession, to *jandalwasa*, *dharماسala*, or *chopal* or any other place where arrangements have been made for the *baraat* to stay and to be entertained. In the evening, the *baraat*

goes in procession, the boy on a mare, to the bride's house where the *baraat* is received by the people on the bride's side. The first ceremony to be performed is called *barothi* or *milni* when the boy's father and the girl's father embrace each other and the latter gives some money to the boy's father who also pays something to the barber and the Brahman on the girl's side. At the door stand women singing and *jai mala* is put by the bride around the neck of the bridegroom and *vice versa*. After this colourful ceremony the bridegroom is taken into the house and the *baraatis* are then entertained to a delicious and sumptuous dinner with merriment galore.

Thereafter the key function starts. Sacred texts are recited in Sanskrit mostly by Vedic *riti* or otherwise. The sacred fire is lighted, the Brahman ties the *palla* (hem) of the girl's wrap to a piece of cloth called the *patka* and the boy takes the latter over his shoulder and leads her round the fire anti-clockwise four times, and then she leads him round three times. This is called *phera* ceremony and constitutes the core of marriage. *Phera* is now recognised as one of the essential ceremonies under the Hindu Marriage Act. After this the Brahman formally asks each whether he or she accepts the other, and is ready to perform duties towards each other, which are set forth in time-honoured traditions and put forth in very impressive language full of appropriate similes and metaphors. The bridegroom and the bride then exchange places. Now follows the *kanyadan*—the so-called formal bride-giving. The parents thus give away their daughter in marriage and usher her into the new world of *grihastha*. The ceremony normally takes between two to four hours—primarily depending upon the ingenuity, skill and knowledge content of the priest. If he is content with reciting the holy *mantras* and contends himself with the bare rituals, the ceremony is just over in two hours—especially when he is unostentatious and believes in the economy of words. If, however, he is in a mood to parade himself and make a show of his learning, then he will go into the how and why of each ritual and will wax eloquently on the duties of the husband and wife—quoting copiously both from mythology and scriptures. The ideals of Sita, Savitri, Damayanti and Mandodri are extolled and there is sometimes a sermon administered to the young man over his multifarious prospective duties.

The ceremony is highly colourful, picturesque, and at times interesting also. There may, however, be noticed minor variations among certain castes in the performance and observance of these ceremonies.

Social mores and folkways change like fashions. There was a time when dancing girls were invited at the weddings, their songs and dances provided

fun and frolic to the people, especially in the rural areas, which had no other source of entertainment. The cinema has changed all this. The practice of inviting dancing parties has virtually gone out of fashion. In villages, gramophones fitted with loudspeakers have taken their place. A marriage in a village is a gala occasion and the entire community is regaled to popular tunes and song-hits of the film-land. In cities, marriage celebrations have virtually become standardised with the assistance of specialised contractors. It is of interest to note the social change. The house of the bride is lit up with multicoloured fairy lights, *shamianas* are put up and the passage is adorned with paper flower decorations. Film songs are played through loudspeakers. The *baraat* approaches at the fixed time heralded by incandescent lights and a band playing hot music to which the young boys and girls do twist-dancing. The feeding of the *baraat* is usually undertaken by a separate contractor. All these elaborate and expensive arrangements are made just for one night. This standardised system is gaining currency in Karnal and other important towns of the district and shows how things are changing under the impact of modernization.

Previously, the *baraat* used to stay at the bride's place for 3 days but things have changed under the stress of economic forces. Now the *baraat* returns the same or the next day. The bride's maternal uncle escorts the girl, followed by women singing, to the *rath* (bullock cart) or bus or car in which she is to travel. The bride follows the bridegroom during this short walk. A few small coins are thrown over the heads of the couple as a mark of good wishes and the procession starts back for home.

A peculiar custom of *santa* prevails in the Ror community. A *nata* of a girl from one side in exchange for a *nata* of a girl from the other side is insisted upon. If the prospective bridegroom does not have a sister to offer in marriage to the brother or some other near relation of the prospective bride, he must come forward with an offer from amongst one of his cousins or other relations. If he cannot find one such relation to offer, the boy has to wed celibacy in place of the girl.

Muklawa (consummation of marriage) follows the marriage ceremony. After marriage proper, the bride returns to her parents and remains there till *muklawa*. This ceremony is significant in so far as it mitigates the evil effects of early marriage to some extent. Accordingly, the period between marriage and *muklawa* is so spaced as to allow the young couple to attain puberty before any opportunity is provided to them for consummation. But here again there is one peculiarity. *Muklawa* must be solemnised during the odd years, i.e. first, third, fifth, etc., after the marriage and in no case during the even

years, i.e. second, fourth, sixth, etc. Now mostly that the boy and girl are married at a fairly mature age, this ceremony exists in name only and may be formalised on the same day immediately after marriage or on the following day. In that case, it is termed as *patra-pher*.

Anand Karaj prevails among the Sikhs. The distinction between *Anand Karaj* and the Vedic marriage is that in the former the bride and bridegroom instead of going round the fire, go round the holy *Granth*. Some extracts from the sacred book are read and though they are originally meant to describe in a figurative way the union of human soul with the Supreme Being, they are made to serve the purpose of sanctifying the union of bride and bridegroom.

Civil marriages can be performed by the Marriage Officer of the district who is the Deputy Commissioner, but such marriages are rare. Only 22 civil marriages were solemnised in the district during the years 1956—70. Marriages under the Hindu Marriage Act are also performed by registration in the office of the Tahsildar who is Registrar for Marriages under this Act. Such marriages are also rare as the registration certificates of marriages are obtained only by the persons who usually go abroad or require such certificates for income tax and other purposes.

Generally speaking, marriages within the *gotra* or with cousins are not approved by society though there are stray instances among some displaced persons from Pakistan, of marriage with the daughter of a maternal uncle or aunt which may be ascribed to Muslim influence. Inter-caste marriages are not approved either.

Dowry system.—Although a rotten social evil, the dowry system prevails everywhere. Even the dowry legislation of 1961 has not succeeded in achieving its object. Their ideas not having been reformed, people follow the old custom, and if necessary, by-pass the law.

Marital age.—Early marriages were a usual feature in the district in the past. But the position seems to have changed considerably during the last two to three decades. The Child Marriage Restraint Act enforced from April 1, 1930, provides penalties for the celebration of marriages of male children under 18 and female children under 14 years of age. Consequently there has been a tendency for postponing marriages beyond the age specified in the Act. The general marital age at present is 18 to 20 years in case of boys and 14 to 16 years in case of girls. Of the age group 10—14 years, according to 1961 Census, there were 4,672 married males and 15,119 married females while the number of widowed males and females of the same age group was 16

and 26 respectively. It is thus evident that the institution of child marriage, like that of dowry, still prevails to some extent despite the civil law prohibiting it.

Widow marriage.—*Karewa* or *karao* is a simple sort of marriage for widows. It is in essence, the Jewish Levirate; that is to say, on the death of a man his younger brother has first claim to the widow, then his elder brother, and after them other relations in the same degree; though *karewa* cannot be performed while the girl is a minor, as her consent is necessary. But it has been extended so that a man may marry a widow whom he could not have married as a virgin, the only restriction being that she is not of his own clan. Thus, a Gujar may marry a Jat or Ror widow of any clan but his own. Neither marriage nor adoption, nor any other ceremony, can change the clan of a man or woman; that being, under all circumstances, the clan of the original father. *Karewa* is effected by the man throwing a red wrap over the woman's head and putting wristlets (*chura*) on her arm in presence of male and female members of the brotherhood. Such a marriage generally does not take place within a year of the husband's death. Among Rajputs, Brahmans and Tagas, a woman usually does not re-marry.

Under no circumstances can a woman perform the *pheras* twice in her life. But in case the husband dies shortly after marriage and the girl has not lived with him or if she has no issue, she is re-married with all the ceremonies usual at the marriage. This is called *punar vivah* which is mostly adopted by the Banias. Recently *karewa* has been introduced among Brahmans as well.

Widows who may not wish to re-marry, live on the property left by their husbands. In urban areas, however, the educated ones take up some employment or engage themselves in some kind of paid or honorary social work.

Divorce.—Divorce is not much prevalent. There is a general tendency to suffer hardship resulting from ill-matched marriages. This is particularly true of uneducated and conservative people. They prefer to lead a miserable life rather than to dissolve the marriage. Another practice has been to leave the girl with her parents and never recall her. However, with the coming into force of the Hindu Marriage Act, 1955, a few cases of divorce are being

instituted in the law courts :

Year	Cases instituted			Divorce granted (Allowance allowed)	Petitions dismissed	Cases compromised	Cases pending
	Pending cases	New cases	Total				
1956	—	66	66	14 (4)	46	—	6
1957	6	56	62	10 (3)	35	—	17
1958	17	14	31	15 (6)	13	—	3
1959	3	31	34	12 (2)	15	—	7
1960	7	42	49	19 (9)	25	—	5
1961	5	26	31	10 (3)	18	1	2
1962	2	25	27	10 (2)	14	1	2
1963	2	24	26	5 (1)	9	—	12
1964	12	45	57	7 (2)	39	—	11
1965	11	10	21	3 (—)	16	—	2
1966	2	38	40	15 (5)	15	—	10
1967	10	23	33	6 (2)	11	—	16
1968	16	52	68	11 (3)	37	2	18
1969	18	99	117	22 (7)	42	4	49

Other rituals and customs.—Different social groups have their own traditional customs which they observe at different stages of life. The old Hindu way of living was fraught with many traditional *samskaras* and rituals. In the course of time these got worn out and were no longer in keeping with the changing times. Under the influence of modern education and new ideas their hold is loosening. Of a multitude of these customs, a few are still traditionally observed though not with so much zeal and fervour. The very birth of a child is an occasion to celebrate and particularly the birth of a son is considered as an event of rejoicing. To announce the birth of a male infant an iron plate is rung in the room where delivery takes place. The anxious relatives waiting outside consider it auspicious and congratulate each other. Superstitious

ceremonies accompany the birth of a child. The mother and the infant are kept in a separate room for 40 days. The door and the windows, if any, are always kept closed even in hot and sultry weather conditions. A small dung cake fire is kept smouldering outside the room as a protection against all evils. A branch of the margosa tree is hung on each side of the room as an auspicious sign. The clothes of the mother are not changed for 40 days ignoring the dirtiness, stinking and unhealthy conditions and the discomfort thus caused to her. The waste water of the child-wash is diverted to a specially dug out pit within the house which, however, is covered and closed later on. *Mundan* ceremony is performed when the boy is a few years old. On this occasion, his hair is cut and head shaved for the first time and friends and relatives are entertained to a feast.

While the Muslims and Christians bury their dead, Hindus and Sikhs cremate their dead. If the cremation was performed on the bank of the Yamuna, water is thrown on the ashes, if in the Kurukshetra, the bones are thrown into one of the sacred tanks, and all is over. Otherwise on the third day the knuckle-bones and other small fragments of bone (*phul*) are collected.¹ If they can be taken to be immersed in the Ganga at once, well and good; if not they are buried in the jungle. But they must not be brought into the village in any case: and when once ready to be taken to the Ganga, they must not be put down anywhere, but must always be hung up till finally thrown by a Brahman into the stream. Other post-cremation rites include 12-day (*bahra*) or 13-day (*tehrami*) mourning locally called *angaari*. Children under 8 years of age are buried without ceremony.

POSITION OF WOMEN

Every region has its own traditions and prejudices. So has Haryana and the Karnal district is no exception. People in the rural areas are mostly conservative. Some of them are even averse to sending their daughters to co-educational schools. The education of women has lagged behind as compared with that of the boys. And this factor has been responsible for their general backwardness. Still, there exists some awareness of the education of women. The old thinking that the social structure would crumble if women were educated, is disappearing. Greater opportunities for them have however brought forth distinguished ladies who are able to serve their State in an increasing measure.

The parents in urban areas, however, try to give their daughters higher education so as to make them economically independent. Some educated urban girls

1. This rite is locally called *taiyya*. The pall-bearers are fed with *khichri* on that day.

take up jobs before their marriage and a few continue to work even after their marriage. But generally speaking, the village girl does not like to follow any career; she prefers to sit at home and look after her children and household affairs rather than to adopt a career to supplement her husband's income.

The lot of the rural housewife on the whole, is a hard one. She goes to the village well with *ghara* (pitcher) on her head and draws water twice in the day, cooks the morning meals and, when the men are at work in the fields, carries it out to them. At the seasons for weeding and harvesting she does a considerable share of this work, and after going home has to cook the evening meal. In addition she has to collect the dung from the fields and make it into *gosas* (dung cakes). She also attends to spinning.

Early in the morning and in the evening women can be seen carrying two to three empty pitchers on their heads from the village to the well near the pond-side, and returning from the well to the village with pitchers full of water. It is a remarkable feat of balance, and gives them that graceful gait and poise which the poets compare with that of the swan. When they go to the well they put on their best clothes, for the well is also the village club where gossip is exchanged. The married women observe *purdah* or veil and only the maidens go about with uncovered faces. Quite a few of them are good looking in their teens, but the drudgery of life tells upon them in a few years. Socially the Jats are more advanced than other castes and their women do not have to live out their lives in perpetual widowhood on the death of their husbands. A young Jat widow seldom remains such for long, and she is readily accepted as a wife by one of the brothers of the deceased husband.

The position is a bit different in urban areas where the condition of women is in the process of a vital change. Their education has got new impetus with the opening of numerous academic and various technical institutions. With the spread of education, social barriers against their employment are collapsing by and by. They are increasingly replacing men or participating with them in parallel fields, such as social work of various kinds including education, child welfare, community work, arts and crafts. Working women though economically active, still occupy a subordinate position in social life but they do not observe *purdah* any more.

Prostitution.—Trafficking in women for immoral purpose does not exist, nor is there any organised gang of traffickers of women in the district.¹

1. See also Chapter on 'Law and Order and Justice'.

HOME LIFE

Although it may appear to a casual observer that the home life of villagers is patterned on traditional lines, yet a more careful view at once indicates the directions in which changes in this pattern are percolating from the more modernised urban localities.

Villages.—The villages of Karnal are usually built on mounds which were selected probably for safety or they may possibly be existing on the ruins of older *abadis* which through the centuries were submerged as a result of some natural upheavals. A group of villages is called *tapa*. At the outskirts of the villages are the *goharas*, the pyramid like structures, in which dung-cakes are stored. They form a conspicuous feature of the rural landscape. In the houses are circular bins of clay in which grain is stored. Surrounding the village *abadi* is a narrow belt of cultivated land irrigated with the aid of persian wheels or *charsas*.

With the reclamation of forest land during the last few years, the situation has greatly changed. In place of trackless forest of *dhak*, one finds well laid out farms around the roadside. This is mainly the contribution of the colonist farmers from Jullundur and Amritsar as well as the Virk settlers from Shekhupura (Pakistan) who are hardworking farmers and can meet the challenge of hard life in these areas.

Dwellings, furniture and utensils.—The houses in rural areas are mostly built with mud bricks. But in the Kaithal tahsil, these are pakka and partially double-storeyed with a *chaubara* or two-three rooms. However, elsewhere too, the latest trend is to build pakka houses. For their brick requirements the villagers do not have to go to the brickkilns but themselves manufacture the bricks and construct their own houses. The home-made clay bricks of unstandard size are arranged in a circle outside the village and then burnt. The fuel consists of *bhurli* (waste stalk of gram), litters and *gosas* (dung-cakes). This activity which is a common sight in the months of Chaitra-Baisakh (March-April), creates so much smoky atmosphere that it becomes difficult for the residents of the village to breathe freely.

Entering the street door of a private village house, you pass into the outer room or *dahliz*, beyond which you must not go without permission, and where your friend will come and talk. It is often partly occupied by some calves. Beyond this is the yard (*chauk*) separated from the streets by a wall, and in which the cattle are tied up in cattle-sheds (*bara*), and the women sit and spin. Round this are the houses occupied by the various households of

the family. In front of each is a room with the side towards the yard open (*dalan* or *tamsal*) which is the family living room. On either side of this will be a *sidri* or store room and a *chatra* or cook-room with its *chulha* or hearth; and there is often an inner room beyond called *obri* or *dobari* if with two doors, and *kota* or *kotri* if with one only. Upstairs is the *chaubara* where the husband and wife sleep; while the girls and children sleep downstairs, and the boys in the *chopal* or *dahliz*.

There are some receptacles for grain (*kuthla*) made of rings of adobe built up into a cylinder. This has a small hole in the bottom, out of which the grain runs and keeps always full a small receptacle open in front, from which it is taken as wanted. Another form is *kothi* which is usually built in one of the rooms. It is rectangular in shape and besides foodgrains, other articles are also stored in it. This has a *taki* (small window) for placing in or taking out the articles. The face of the *kothi* is decorated with colourful drawings in indigenous style. *Basnaut* is another practice. Three or four big earthen containers called *maat*, *ghara* and *jhakri* (big, medium and small in size respectively) are placed one over the other in an artistic manner. In addition to its utility for the storage of foodgrains, it is considered as an item of interior decoration. There are some ovens (*bharala*, *hara*) for warming milk and some recesses in the wall to act as shelves (*pendi*); one or two swinging trays or rope rings for water vessels.

With the spread of education and growing outlook for better sanitary and health facilities, the villagers are changing the pattern of their houses. They now have a separate cattle-shed and also care for proper lighting and ventilation. The availability of electricity in the villages has also changed the look of the houses. But it is not customary to provide bathrooms.

The dwellings in old urban areas are almost pakka. Facilities of bathrooms, usually dry latrines, etc., are mostly available. The houses in new townships are provided with all the modern amenities, they are generally electrified. Piped water-supply is available at Karnal, Kaithal, Panipat, Nilu Kheri (Nilo Kheri), Thanesar, Shahabad (Shahbad) and the rural areas of Deoban, Kheri Sharaf Ali and Kheri Sheru. Sewerage schemes have also been undertaken at Karnal, Panipat, Kaithal and the rural area of Samalkha.

The furniture of the villagers generally consists of a few bedstead (*manja*, *khat*) made of wooden frames covered with netted string; a few small stools (*pira*, *pida*, *khatola*) of identical construction; a few small low wooden tables

(*patra*) ; and some large baskets (*pitar*) to store clothes in. There are some small shallow baskets (*dalri*) for bread and grain; and some narrow-mouthed ones (*bijri*) to keep small articles in.

In urban middle class houses, chairs and tables may also be seen. The homes of the well-to-do are tastefully furnished and decorated in the modern style. Sofas, wardrobes, *palangs*, *moorhas*, tables and chairs of different description and other items of modern furniture fill the houses. Possession of furniture is considered to be a sign of social status and taste. The paucity of furniture in an average home is partly offset by ordinary framed pictures and calendars which are readily available. Urban influence has led even some villagers to go in for chairs, tables and better type of cots though on a modest scale.

The metal vessels consist of large narrow-mouthed cauldrons (*tokna*, *tokni*) for storing water in and cooking at feasts; smaller vessels of similar shape (*batloi*) for ordinary cooking and carrying water to the fields; still smaller ones (*lota*, *gadwa*, *banta*) for dipping water and drinking from; some cups (*sarda*) without handles ; some tumbler-shaped drinking vessels (*gilas*, corrupted from English glass) ; a broad shallow bowl or saucer (*kotora*, *bela*) for drinking hot liquids from; a large tray (*thali*); a larger tray for kneading dough in (*parant*); a brass ladle (*karchi*); a spatula for turning bread (*koncha*, *palta*, *khurchna*); a thin iron plate (*tawa*) for baking cakes, and some pairs of iron tongs (*chimta*), a fry-pan (*karai*) and a sieve (*chalni*), both of iron; and an iron bucket (*dol*) for drawing water from the well. The utensils are made of brass, and perhaps a few of bell-metal (*kansi*). One may, however, come across earthen kitchenware in the poorer families. Most common of these are: *pharva* (a utensil for cooking vegetables, *dals*, etc.) and *kadhoni* (a utensil for boiling milk). Karnal is known for such kitchenware.

Lately, the use of kerosene oil stoves of various kinds for cooking purposes has gained sufficient popularity. The dearth of fire-wood consequent upon the reckless cutting of forests in the recent past has also helped in popularising the use of stoves. Utensils and decorations have undergone a change particularly in urban areas. Side by side with the copper and brass utensils, porcelain and glasswares are finding favour with the people. Stainless steel utensils are costly and though in use, have not been so much popular. The use of electrical appliances like heaters and table lamps is gaining popularity even in the villages. The radio receivers have come to be regarded as a necessity and larger and larger numbers of people, both in

towns and villages, are using these. Transistor sets are found to be particularly useful even in places which have no electricity.

Dress and ornaments.—The dress of the rural people is simple. The every-day clothes are always made from the coarse cloth whether mill-made or handicraft. The men wear a *pagri* (turban) or *dopatta* (a strip of cloth) wound round the head, a shirt or *kurta*, an *angarkha* (a long overcoat) or *mirzai/kamri* (a small overcoat) fastening with a flap at the side, a *dhoti*, *arband* (a short *dhoti*) or *langar* (a still shorter one) and a pair of shoes. A *chadara* (thin sheet) or *chadar* (thick sheet) in hot weather and a *khes*, blanket or *razai* (quilt) in cold weather may be used as a wrapper. An *agoncha* (handkerchief) is used occasionally. Men in service wear pants or pyjamas while others at large generally wear *dhotis*. A complete suit of male clothes is called *jora*.

Although in the recent past, men used to wear jewellery,¹ it is not in vogue now. However, a gold finger-ring is worn by most people in urban areas.

The women wear an *angi* or *angia* (a bodice) to support the breasts, a *kurti* (a small shirt down to the hips) buttoning to the right, a *ghagri* or *lehnga*² (a petticoat) or *paijamah* (drawers), and an *orhna* (a wrap). A complete suit of female clothes is called *til* or *tiwal*.

Women wear a band of silver *kauries* (cowries) going up the parting of the hair and fastening to pins on the back, *bindi* (a frontlet on the forehead); *bujni* (plain earring); *bali* (earrings on the top of the ear with loops of chain); *nat*, *nath* (nosering); necklace of 14 coins (if all rupees *jhalra*, if one a gold mohur *tikawal*); *tad*, *tadia* (bossed armlets); *pachheli*, *chhan*, *kangni*, *chura* (bracelets in the following order from the elbow to the wrists); *dharu* (a breastplate of silver chain); *pallu* (chains and bells fastened to the right-hand corner of *orhna*); *ghingat* (bosses and chains fastened to the front of the *orna* so as to fall over the case); *nara* (a silver tassel on the petticoat over the right hem); *pajeb* (a bunch of chains and tassel on the ankle); *bauk* (solid anklets). Of course the varieties have innumerable

1. Previously the ornaments worn by men included *gokru* (earrings), *kangan todar* (bracelets made of a cylindrical bar of metal), a single necklace with a small locket (often sacred to Shiv) or rosary always containing beads (*mala*), a *kantla* (broad necklace made of chains), a *kanti* (locket) *agunthi* (ring) and if a headman, a ring with a seal in it. Boys often wore *tagri* (waist bands of silver chain).

2. The use of *lehnga* lingers among elderly women alone.

names. A woman's social standing is greatly determined by her jewels. The nosering, the plain armlet, and the *chura* or wristlet have a social significance. The armlets and bracelets and anklets, being solid and not easy to remove, are worn always; the rest only on special occasions, such as fairs and the like. The ordinary investment for spare capital is to buy jewels for one's wife, as the money can always be realized when needed.

The practice of tattooing (*khinna*, *godna*) once common among women (other than the Rajputs and Brahmans) has almost disappeared. Men had small holes drilled in their front teeth, and gold let in (*chaunp*), but that too is rare now.

After the Partition, displaced persons from Pakistan brought with them their own traditions. The last two decades witnessed a significant cultural fusion between the old residents and the new. Thus the *salwar* and *kamiz* are being increasingly adopted by young girls studying in schools, and even some of the grown-up women have started discarding the old graceful *ghagri* in favour of the *salwar*. They have also almost given up the use of their heavy silver ornaments. The tall and well-built Jat women appear very graceful in their *ghagris* and their bright clothes lend charm and colour to the countryside. The gradual disappearance of the *ghagri* with its bright colours is perhaps not altogether a welcome feature.

People belonging to the learned professions, officials, college students, etc., irrespective of their origin (whether rural or urban), caste and creed, generally dress in western style.

Food.—The simple food of the people has little variety. The number of meals varies according to seasons of the year and the nature of work done by the people. The morning meal of a farmer often taken to the field at midday by the housewife, consists of three or four loaves of *bajra* or wheat or wheat and gram mixed and the evening meal taken at home consists of *khichri* (a porridge) of *bajra* (millet) and *moong* (a pulse) and sometimes of rice and *moong* or *dalia* of wheat is eaten. People in urban areas—shopkeepers and those working in offices eat their morning meal before going to work. Of the flours *bajra* is preferred though *bejhar* (gram and barley mixed) and *jowar* are often used. Wheat flour is now being increasingly used, and is particularly offered to guests or when the Brahmans are fed at the time of *kanagat*. Vegetables including *saag* and pluses are eaten with bread, and

1. They used to tattoo the chin, the inside of the forearm, the outside of the upper arm, the sides of the waist and the calf of the leg.

in its season a good deal of *gur* is consumed as a necessary protection against cold. Milk and buttermilk are consumed daily, and salt and chillies are freely used.

In urban areas during the past few years the use of vegetable oils has become common. People also grow vegetables and fruits which are freely consumed. Since the Partition, the habit of meat eating has been on the increase and *jhatka* shops where meat is sold, are seen in a number of towns. While the Jat has acquired a taste for meat eating and enjoys his meals in a *dhaba* on his visit to the town, the Bania may also enjoy his meat dish surreptitiously in one or the other of the restaurants which are springing up in the towns.

So far as drink is concerned, tea as a stimulating drink has become very popular with both urban and rural people. Tea stalls are found in every town and big villages. In summer months some people prefer to drink a glass of sherbet or *lassi*. Coca-Cola as a soft drink is becoming popular with younger people. Local country-made liquor is consumed practically in every village. Drinking has now become a matter of habit with a larger number of people, the rich and the poor alike.

Men are much addicted to the use of tobacco — cigarette and bidi smoking in towns and hookah in villages. Women do not touch it.

COMMUNITY LIFE

As everywhere else, community life is somewhat more effectively organised in villages than in towns. A growing town cannot claim to be the nucleus of a single community. Its various social and economic groups are more exclusive than inclusive. They do not come into such frequent contact with one another. Civic responsibilities no doubt, are applicable to all, but these are not cohesive in their nature. And this is more true of an expanding town which is sprawled over a large area. There is a growing tendency for voluntary social agencies to establish themselves in local areas or small towns and organize community life in some form or other. They also organize mass celebration of important festivals in their respective areas.

The social situation in villages is different. Big and small land-owners, agricultural labourers and other workers are not far apart from each other. The limited amenities and amusements of village life are equally shared by all of them and require their combined attention. The Community Development

Programmes have given a fillip to community activities of various kinds and the *panchayats* have also become a nucleus of community activities.

FOLK CULTURE

Folk culture is reflected in folk-songs, dances and theatre. With fast changing conditions, urban life is slowly but surely making an inroad into rural life taking away some of its inherent beauty and cultural wealth. The gramophone-record is an onslaught on the song of the village *rāgi* and the radio seeks to replace the group festivals of folk-songs and dances. However, folk culture still continues to enliven the countryside which hums with songs and dances on festivals and other numerous occasions. Of late, All India Radio is giving good attention to the revival of folk culture and broadcasts 'Lok Manas' featuring programmes on Haryana culture.

Folk-songs.—Folk-songs with their burden of love and labour have a peculiar charm of their own. In these songs, the heart-beats of the rural people vibrate with their hopes, aspirations, love longings, joys and sorrows. We also hear about the changing season, tinkling of bells of the cattle returning home at sunset, waving of fields of green wheat speckled with yellow *sarson* and the emotional outbursts of married couple at their union and separation.

There is a variety of folk-songs, each connected with a particular occasion. A good number of these are nature songs sung in particular months. The month of Sravana (July-August) brings ecstasy in its wake. The impact of the season on the emotional life is obvious. With the onset of black clouds of the monsoon and the raging torrential rains, love longings are evoked. When the sky is overcast with the hanging clouds, young women come out of their homes and get lost in the raptures and ecstasies of nature. Their hearts echo in songs and they sing while the swing :

O mother ! torrential rains have come,
 All the tanks and ponds are full of water,
 O mother ! the month of Sravana has come,
 Swings are seen on every tree,
 O mother ! *bajra* and *jowar* have sprouted,
 The landscape has turned green,
 O mother ! plants are growing speedily
 Like a newly wedded girl.

O mother-in-law ! the month of Sravana has set in,
 Get me the seat of swing made of sandal wood,
 O mother-in-law ! the month of Sravana has set in,
 Get me the swing made of yellow yarn.

Teej or Haryali Teej is the main festival of Sravana, falling on *sudi* 3 (third of the lunar month). It is observed throughout Haryana. By this time the rainy season starts gathering momentum replacing the scorching summer. To celebrate this change, young girls of the countryside yearn for the approach of Teej. It is an occasion for the newly-married girls to go back to their parents. The mother-in-law is approached for permission. The following lines beautifully depict a dialogue between the *bahu* (daughter-in-law) and her *sasar* (mother-in-law) :—

There comes, O mother-in-law ! the month of Sravana,
 Let us to our father's home proceed.

O my bride ! who the companions 've come ?
 With whose permission will you proceed ?
 To your father's home indeed !

O mother-in-law ! brother, the companions 've come,
 With your permission I'll proceed,
 To my father's home indeed !

The mother-in-law would not object to her going but what about the field and domestic affairs ? Who would attend to these jobs in her absence ?

Who will do the hoeing ?
 Who will grind the allotted grain ?
 Who, O my bride ! will wash my head ?
 And who will fry the *kasar* ?

The intelligent daughter-in-law works out the problem very ably :

Elder *jeth*, O mother-in-law ! will do the hoeing,
 Elder *jethi*, O mother-in-law ! will grind the allotted grain,
 Barber's wife, O mother-in-law ! will wash your head,
 The Barber's wife will fry the *kasar*.

The month of Phalguna (February-March) is a pleasant period which inspires the women to singing and dancing. It announces the advent of spring; the wintry veil of fog and mist is lifted from the face of the earth

and the whisper of spring is in the air. In moonlit nights after they are free from daily chores, the women congregate and sing songs :

Two daughters-in-law in a house,
Both go for water,
O dear ! colourful Phalguna has come.
The scorpioid ring slipped from a daughter-in-law's foot finger,
And the daughter-in-law behind picked it up,
O dear ! colourful Phalguna has come.

In blooming spring buoyant feelings spring up and find expression through folklore :

Mangoes ripen in Sravana,
In Phalguna even old women get young.
Ask my sweetheart to come uninformed
In Phalguna and escort me to his place.

Indispensable attendants to various rituals and ceremonies are the ceremonial songs, marriage songs and songs on married life. The following lines which are usually sung at wedding ceremony contain a specific satire in which the target is the marriage party :—

We invited the handsome youth, but the ugly ones have come ;
We invited the fair-coloured, but the black ones have come ;
We invited the slim youth, but the bulky ones have come ;
We invited the robust youth, but the old and weak have come.

A woman sings a lullaby when she rocks the cradle. Invariably such a song has soft and tender feeling quite natural to the theme :

Your grandmother is rocking your cradle,
O my dear son !
May you always swing eternally in life's cradle !
Your grandfather is rocking your cradle,
O my darling son !
May you always swing eternally in life's cradle !

The folk-songs are essentially lyrics giving a glimpse into the woman's heart. These describe a girl's longings for love and marriage, her initial inhibitions, her usual apprehensions, her emotional reaction to the dreary lot in a strange house, complaints from the young wife regarding the monotony of domestic life and the various types of odd work which she is compelled

to do, pangs of child birth, etc. Love songs are the most common since love in its varied forms provides numerous themes. The socio-economic aspects too sometimes find expression. Indeed, it is the village woman who has preserved the tradition of folklore.

Folk-dances.—Folk-dancing, an outburst of surging emotions, at times accompanies folk-singing. The celebration of Phag is a significant festival and its celebration continues for a month. Locally, it is also called Dhuhlaindi because it is celebrated in a season when dust storms blow. In March, after their daily chores, women congregate in the village in an open space and sing and dance till late at night. Their melodious sound spreads through the village and resounds in gaiety. The dance usually starts with the lines :

O dyer's son ! beat the *daph* rhythmically,
Beat it so beautifully that
The Yamuna water may hear
And turn more charming.

The women sit in a circle and sing to the sound of drum-beats or pitcher-beats. Two, sometimes four, women dance in a circle to the tune of the song. Though the congregation is only of women, they sometimes dance with their faces covered. The style of the dance on this occasion resembles *gidda* of the Punjab.

The Magha *sankrant* (first day of Magha month) is an occasion to rejoice for the village girls. According to a prevailing custom, the wedding *sehra* of the bridegroom is kept safely in the bride's house. It is taken out on the following Magha *sankrant* and is considered auspicious to break it into pieces on this day. The ceremony is called *sehra todna* or *mod todna* and is performed by the girls who sing, dance and frolic about in merriment.

Folk-tales.—The region is rich in legends and folk-tales many of which form the theme of folk-theatre and the songs of village bards. The impact of folk-tales on social life of the people is manifest in the characters from the tales forming the motifs of the facades of houses and *chaupals*.

Among the popular folk-tales of Sorath, Hira Mal Jamal, Nautanki, Bhartri Hari, Gopi Chand and Nihal Dey, the last mentioned finds much favour with the people. Nihal Dey was the daughter of a ruler of Indergarh. Tradition assigns the location of Indergarh near present Indri. The ruins of Naulakha Bagh of Nihal Dey can still be seen there.

Folk-theatre.—*Swang*¹ or *saang* is the main form of the folk-theatre of the region. It owes its origin to Ram Lila. Folk tinge was given to the stage some 80 years ago by Hardeva and Deep Chand. Later, Mai Chand, Baje Ram and Lakhmi Chand popularised the *swang*. Lakhmi Chand endeared *swang* among the general public by introducing the local dialect. He rendered about 200 dramas in *ragini* and staged these in the form of *swangs*. In later years vulgarity and nuisance crept into *swangs*; it made them unpopular and they now seem to have become a thing of the past.

GAMES AND RECREATIONS

Wrestling, *kabaddi*, *gindo tora* or *gindo khuli* and *gulli danda* (tip cat) are popular indigenous games in the district, the last two being usually played by children. *Gindo tora* or *gindo khuli* is the indigenous version of the game of hockey and is played with a stick and a ball made of rags and twigs. *Gulli danda* is played in the streets and in a ground outside the village. Wrestling and *kabaddi* are, however, popular sports among the young and the middle-aged men. *Kabaddi* is often played in the moonlit nights during the months of Phalguna and Chaitra (February-March). *Kabaddi* matches are enthusiastically arranged during festivals particularly Teej and Raksha Bandhan and at fairs like Kurukshetra Fair and Pehowa Fair. Two teams take part in this game. Of a number of varieties in which the game is played, the two types popular in this district are Haryana style and National style. Haryana style *kabaddi* is played in a circular field with a periphery of 75 feet (23 metres) with 10 players on each side while the field for National style *kabaddi* is marked as a rectangle of 13 metres by 10 metres. In Haryana type, a player of one team goes to the court of the other team repeating *kabaddi kabaddi* or *kaudi kaudi* in one breath. If the player after touching and encountering any player of the opposite team returns to the boundary dividing the two courts still uttering *kaudi kaudi* in the same breath, the particular player of the opposite team is considered to be out and that team loses one point. In case the player does not return to the boundary in one breath, he is considered to be out and his team loses one point. In the National style, the player going to the court of the opposite team may be encountered by any number of players

1. *Swang* is a form of open-air theatre and the stage is in the midst of the audience. The formalities of the drama like costumes, curtains and make-up are hardly observed. The audience sit on all the four sides whereas orchestra takes its seat in the middle of the stage. Generally, the leader of the *swang* party plays the role of hero and other actors play different roles including that of females. In summer it is played late at night and continues till the early hours of the morning, while it is performed at noon in winter. The mythological stories and folk-tales generally provide the theme.

of the other team. If he does not return to the boundary line dividing the court, his team loses one point but if he reaches the boundary line in one breath the other team loses points corresponding to the number of players who encountered him. The playing time for the game in both the types is the same, viz. 45 minutes including an interval of 5 minutes. The team securing more points wins.

To encourage sports in the rural areas, the State Government gives grants for the construction of playgrounds and also provides coaching facilities. In addition, the State Sports Department has constructed seven playgrounds at Siwah and Ugra Kheri (Panipat block), Shamgarh and Kirmach (Nilu Kheri block), Bastali (Nisang block), Kaul (Pundri block) and Guhna (Kaithal block).

Modern games like hockey, cricket, football, volleyball and basketball are popular among students of urban areas where there are facilities of playgrounds while games like *kho kho*, netball, skipping, etc., are popular among girls.

There are a number of sports associations functioning in the district, viz. District Hockey Association, District Football Association, District Kabaddi Association, District Basketball Association, District Athletic Association and District Volleyball Association. These associations organise tournaments at district level and select the teams to compete in the tournaments at State level. This also helps in discovering promising talent for national and international events.

Chess, cards and *chopar* are some of the indoor games which are played in urban as well as rural areas. The villagers enjoy these games in *panchayat ghars*, *chopals* or wherever convenient along with a puff of hookah or while inhaling *bidi*. Having no other engagement, the *baraatis* accompanying the *baraat* to the bride's village eagerly indulge in these games to while away time.

The State Public Relations Department has provided radio sets to *panchayats*, co-operatives and schools under the 'Community Listening Scheme'. In addition to the occasional drama shows, this Department frequently exhibits films, mostly documentaries, with the help of a mobile cinema unit both in the urban and rural areas. Gossiping and listening to the radio are common pastimes. The portable transistor has become a fashion of the day with everybody without distinction.

The universal media of mass entertainment, particularly in the towns, is the cinema. It suits the pocket of the rich and the poor alike and by and large

is the only place of public entertainment. The district which had only 3 picture-houses (one each at Karnal, Panipat and Kaithal) prior to Independence, now is well provided with 12 picture-houses and 3 touring talkies.¹ Recorded film songs and music are freely played by the lottery ticket sellers and on marriages and other festive occasions.

GENERAL

As stated above, economic and professional groups and classes play an important part in social life. We have farmers' co-operatives of various kinds in villages which bring people together in pursuit of their objectives and give them opportunities of working together. This subject is treated in detail in the Chapter on 'Agriculture and Irrigation'. Since the abolition of *ala malikiyat* and *talukdari* there has been a levelling down of the higher landlord classes. This, combined with other measures of tenancy reforms and a progressive land policy have brought people together on more equal ground and the distinction between the very rich and the very poor is not so great as it was before.

In towns more than in rural areas professional groups of various kinds are organized for the defence of their interests. The lawyers, the medical practitioners, the teachers are all inclined to think of themselves as members of their professional communities whose interests must be safeguarded in every way. The labour unions of various kinds in big and small industries also function to protect the interests of their members. The over-riding feature of these associations in urban as well as rural areas is to strengthen the economic interests of different kinds of groups in the total life of the community.

The foregoing pages, while dealing with the population of the district, the language and dialects spoken by the people, the religions professed by them, the observance of the caste system together with important aspects of social and economic life have brought out the slow pace of change being effected under the influence of modern conditions of living. An important fact in this connection is the introduction in the district of large numbers of displaced people from areas in Pakistan which previously had no social affinity with the people of this district. In more than one way, as explained in the foregoing text, the social, economic and cultural pattern of the urban and rural communities has been undergoing a slow but profound change as a consequence of the Partition. It is no doubt true that while the urban, and,

1. The picture houses are located at Karnal (4), Panipat (3), Kaithal (2), Thanesar (2) and Shahabad (Shahbad) (1) while there is one touring talkie each at Pehowa, Ladwa and Samalkha.

more particularly, the rural people of the district, have their own distinctive Haryana culture, their way of life is generally evolving in conformity with the national rather than the regional pattern.

REHABILITATION

INTRODUCTION

The Partition in 1947 was followed by horrible communal disturbances which inflicted untold sufferings and led to mass migration of population from Pakistan to India and *vice versa*. Lakhs of homeless Hindus and Sikhs from Pakistan entered what was then called East Punjab; their immediate location in a large number of camps and eventual rehabilitation in rural and urban areas created numerous problems which Government faced with courage. The areas now covered by the Haryana State took a leading share in the re-settlement of these immigrants. According to the 1951 Census, the Karnal district alone absorbed 2,50,471 of which 1,32,709 persons settled in rural areas and the remaining 1,17,762 in urban areas as shown below :—

Tahsil	Number of displaced persons settled		
	Total	Rural	Urban
Karnal	92,908	49,201	43,707
Panipat	59,435	19,614	39,821
Kaithal	50,819	37,090	13,729
Thanesar	47,309	26,804	20,505
	2,50,471	1,32,709	1,17,762

Although accurate statistics are not available, it is estimated that 3,00,688 Muslims migrated from this district to Pakistan. They consisted of Afghans, Baluches, Muslim Rajputs, Sayyids, Gujars and Sheikhs. The immigrants into the district were mainly Brahmans, Virks, Mazhabi Sikhs, Aroras and Khatri from the Shekhupura, Gujranwala, Multan and Muzaffargarh districts of Pakistan.

Refugee Camps.—As a first step, the displaced persons were given shelter under canvas tentage in relief camps. Five such camps were set up

at Kurukshetra, Karnal, Panipat, Kaithal and Shahabad (Shahbad). The biggest of these was established at Kurukshetra which accommodated the largest number of refugees. The educational institutions which remained closed for months up to February 1948, provided additional accommodation. The services of the staff and students were utilised in the management of the relief camps. Students who rendered three months social service in refugee camps were considered eligible for the award of certificate/degree of the newly established Panjab University without taking the examination.

Camp life was made reasonably agreeable by the provision of a number of facilities. Free ration was distributed in these camps. Fruits, multi-vitamin tablets and other special items of diet were issued to refugees on medical advice. Blankets, quilts and clothes were supplied during the winter. Dispensaries were opened in tents for immediate medical relief. These camps provided much needed relief to the displaced people and gave breathing time to all concerned to plan their future.

By the summer of 1948 the routine of camp life and administration of relief was well organized. The stage had arrived to take the next step of enabling displaced persons to find independent means of existence. To achieve this, the issue of free rations was limited to those families who had no adult male member and could not, therefore, maintain themselves. The able-bodied male adults between the ages of 16 and 60 years, who began to do some work or who refused to do work when it was available were de-rationed along with their dependents though they were allowed to live in camps. Those entitled to allotment of land were obliged to leave soon after temporary allotment of the evacuee land had been made to them.

During the process of this gradual elimination of gratuitous relief, the unattached women and children and infirm and aged persons who were living in these general camps, were encouraged to shift to Mahila Ashram, Karnal. A Sewa Sadan accommodating nearly 250 women and children was earlier established at Karnal but was wound up on the establishment of the Ashram there.

In the Ashram gratuitous relief at the full prescribed scale was given to women and children and educational facilities were provided for the latter. Various cottage industries and crafts such as weaving, spinning, knitting, tailoring, embroidery, laundry, toy-making, carpet making, *niwar* and durrie making were established to train women and to equip them for earning their livelihood. Arrangements were also made for training them in midwifery

and nursing. On completion of their training in selected industries and crafts, the trainees were encouraged to form industrial co-operatives for earning their livelihood.

RURAL REHABILITATION

The early allotment of evacuee land helped the Government in the speedy resettlement of rural refugees in camps. It was first made on a temporary basis to groups of cultivators who wished to live together. Apart from resettling people the idea was to promote the sowing of rabi crop of 1947-48. All agricultural refugees who owned or held land and were cultivating in Pakistan were eligible for such allotment. These temporary allotments were later converted into quasi-permanent in April 1948. This was a significant step toward the final resettlement of the displaced cultivators on the lands allotted to them and was to serve as an incentive to improve their lands. Claims were invited from displaced persons and orally verified at tahsil headquarters. Unfortunately, in spite of their sufferings many unscrupulous displaced persons made exaggerated claims, and obtained excessive allotments. To meet this difficulty Government obtained original revenue records from Pakistan to verify claims of the displaced persons. These also showed that there was substantial difference between the land left behind in Pakistan by the incoming displaced persons and that abandoned by the Muslims in East Punjab (India). The latter was less. To overcome this problem the available land was converted into standard acres, and graded cuts were applied in making allotments to displaced claimants. The cuts were in proportion to the size of the claim. Bigger claimants lost more in comparison to the smaller claimants.

The quasi-permanent allotments were followed by the conferment of proprietary rights in 1955. While doing so, bogus and excessive allotments were cancelled, and only the genuine claims of each displaced person, verified from the revenue record received from Pakistan, was admitted. This resulted in the return to the evacuee pool of lakhs of acres of evacuee lands usurped by unscrupulous displaced persons.

Lands in the Karnal district were allocated to displaced persons mainly from Gujranwala, Shekhupura, Lyallpur and Montgomery districts, Chunian tahsil of Lahore district and the colonists originally belonging to the Karnal district. Every effort was made to allot land of the similar quality as that left by the claimant in Pakistan. Suburban land was allotted to claimants of similar land or to other claimants on a valuation basis.

AGRICULTURAL LOANS

Allotment of land on a quasi-permanent basis was not enough. The allottees were given assistance by way of agricultural loans for purchasing bullocks, agricultural implements, fodder, seeds, etc., and for repairing houses and wells. In order to minimise the chances of misuse, these loans were advanced in kind. The following amount was disbursed for this purpose :—

<u>Year</u>	<u>Amount</u> (Rs.)
1947-48	5,73,505
1948-49	17,68,278
1949-50	9,26,024
1950-51	13,08,967
1951-52	16,65,570
1952-53	4,91,500
1953-54	3,12,761

The disbursement of the loan was stopped after 1953-54.

RURAL HOUSING

Rain and floods had damaged a large number of houses abandoned by the Muslims and many of them got damaged beyond repairs. According to the statistics available immediately after the Partition, there were 19,169 undamaged houses, 9,715 reparable houses and 10,633 damaged houses beyond repairs. Even these houses were unevenly distributed. In some villages the number of houses was in excess of the needs of the allottees while in others almost the entire *abadis* had crumbled and not a single house was available.

Like land, the houses were also allotted on a temporary basis in the first instance. Rules for their distribution, analogous to those for quasi-permanent land allotment, were framed afterwards. Records were prepared regarding the exact accommodation available in each house, its general condition and its approximate value, along with the list of allottees and the quality and value of houses left by them in Pakistan. The Halqa Revenue Officer, usually a Naib-Tahsildar, was entrusted with the job of allotment of rural houses. A list giving the order of precedence was prepared. After setting aside a few houses for common purposes, allottees were given a chance of selection according to their place in the merit list.

URBAN REHABILITATION

The general trend of shift towards urban areas after Independence made the problem of providing residential accommodation to displaced persons in urban areas more acute. The Government rose equal to the occasion and evolved schemes to utilise the available Muslim abandoned properties and develop more housing colonies. All Muslim-abandoned properties were taken over as evacuee properties and were governed by the Punjab Evacuee Ordinance IV of 1947, later on supplanted by the Administration of Evacuee Property Act, 1950. Such properties comprising houses, shops, vacant stites, *kholas* (dilapidated houses) and industrial establishments were temporarily allotted to displaced persons on rental basis. Their permanent disposal started in 1953-54. Properties valued below Rs. 10,000 (below Rs. 50,000 for industrial establishments) were declared allottable while those assessed above these amounts were sold by open auction. Properties lying vacant or in unauthorised possession were similarly auctioned.

In the urban areas of Karnal, Shahabad (Shahbad), Pundri, Kaithal, Samalkha, Thanesar, Radaur, Ladwa, Tirawari (Taraori) and Panipat, there were 14,385 evacuee properties: 11,433 valued below Rs. 10,000 and 2,952 valued above Rs. 10,000. These became a part of the evacuee pool for payment of compensation to displaced persons having verified claims.

Allottable properties were given away permanently to claimants against their verified claims. If the value of a property was in excess of his compensation amount, claimant concerned was allowed to deposit the excess in instalments. Properties occupied by non-claimants were offered to them on annual instalments.

HOUSING SCHEMES

The properties abandoned by the Muslims were insufficient to provide shelter to all the displaced persons settled in the district. While the Muslim migrants were generally labourers or artisans with a comparatively low standard of living, the in-coming non-Muslims were businessmen and shopkeepers and were used to a much better standard of living. To meet the grave situation arising from the inadequate residential accommodation available in East Punjab, and to provide shelter to the in-coming population according to its income groups, the Government established new townships, in addition to 8-marla (cheap) housing colonies and 4-marla (cheap) tenements. The new townships accommodated the rich and upper middle class displaced persons; the 8 marla (cheap) housing colonies provided houses to the lower middle class and the 4-marla (cheap) tenements to the poor, particularly to displaced

persons occupying places of worship or living in dharmasalas, infirmaries, and those living on pavements. The statement below gives details of houses and sites and shops constructed and plots laid out under various schemes:

	Houses	Shops	Plots
New Township, Karnal	500	24	262
New Township, Panipat	498	26	830
8-Marla (Cheap) Housing Colony, Karnal	200		436
8-Marla (Cheap) Housing Colony, Panipat	150		—
	Tenements		Sites
4-Marla (Cheap) Housing Colony, Karnal	150		
4-Marla (Cheap) Housing Colony, Panipat	400		18
4-Marla (Cheap) Housing Colony, Thanesar	100		
4-Marla (Cheap) Housing Colony, Samalkha	100		
4-Marla (Cheap) Housing Colony, Tirawari (Taraori)	50		
4-Marla (Cheap) Housing Colony, Shahabad (Shahbad)	50		
4-Marla (Cheap) Housing Colony, Pehowa	100		

The houses and plots in new townships and 8-marla (cheap) housing colonies were disposed of at the reserve sale price, under the East Punjab Refugees Rehabilitation (Buildings and Building Sites) Act, 1948. The cost of houses and plots sold, was treated as loan to be recovered in 30 half-yearly instalments. Subsequently with the implementation of the compensation scheme in 1954-55, the benefit of adjustment of public dues against the verified claims was extended to the purchasers of houses and plots in all these rehabilitation colonies. The allotment of 4-marla (cheap) tenements was made under the executive instructions issued with the approval of the Government of India.

In all these colonies, satisfactory arrangements for underground drainage, water-supply and electricity were made and provision existed for amenities such as school buildings, public parks, hospitals and clubs. Most of the plots, earmarked for schools, hospitals, clubs, libraries and religious places have been sold to private registered bodies at half the reserve sale price on the

condition that the plots sold would be utilised for the purpose for which these were earmarked. Shopping centres have also been provided in these colonies.

Mud-hut colonies.—Besides the new houses detailed above, mud-hut colonies were constructed in 1950 for providing accommodation to the residual population in refugee camps. These were constructed on the respective sites of camps in Karnal and Panipat with 1,600 and 600 mud-huts respectively and each mud-hut covered an area of 210 square feet (1905 square metres). These were immediately offered to the occupants of refugee camps who belonged to Scheduled Castes and Backward Classes and to persons who were resourceless and landless.

In 1953, it was decided to transfer proprietary rights of mud-huts to the inmates. Occupants with claims were required to pay the cost of land and super-structure from their claims and others were charged only the cost of land recoverable in 3 annual instalments, the cost of super-structure having been treated as a grant. It was also decided that nothing should be charged from destitute widows and disabled persons.

SMALL URBAN AND HOUSE BUILDING LOANS

The scheme of advancing loans and grants was introduced in February 1948, to help the poor and middle class displaced persons re-start their business, trade or other profession. Under the Punjab Refugees Rehabilitation (Loans and Grants) Act, 1948, the loan was limited to Rs. 5,000 to an individual. The grants were restricted to unattached women, widows and others who were unable to repay loans but at the same time wanted monetary help in their resettlement. The maximum amount of grant was limited to Rs. 500.

Small urban loans.—These loans were advanced to displaced persons to enable them to establish themselves in different vocations. All classes of displaced persons comprising traders, shopkeepers, artisans, industrialists, students, lawyers and medical practitioners were helped under the scheme. The loans carried an interest at the rate of 3 per cent and the recovery of loans started after 2 years of their disbursement. The loans together with all interest were repayable in equal instalments spread over a period of 6 years. The loans and grants were strictly to be utilised for the purpose for which they were asked for by the applicant or sanctioned by the Government. The details of the loan of Rs. 14,81,750 advanced to 2,130 displaced persons during

1948-49 to 1956-57 are as follows :—

<u>Year</u>	<u>Amount</u> (Rs.)
1948-49	8,38,300
1949-50	3,68,250
1950-51	1,80,000
1951-52	—
1952-53	3,500
1953-54	—
1954-55	22,400
1955-56	30,300
1956-57	39,000
Total :	<u>14,81,750</u>

The scheme to advance small urban loans was discontinued in 1956-57.

House building loans.—House building loans were advanced to purchasers of plots sold out by the State Government in new townships. These loans enabled displaced persons to build their own houses on easy terms of repayment. The following amounts were advanced to 294 displaced persons for the construction of houses, during 1949-50 to 1955-56 :—

<u>Year</u>	<u>Amount</u> (Rs.)
1949-50	3,18,875
1950-51	1,50,000
1951-52	3,99,475
1952-53	2,95,447
1953-54	—
1954-55	36,100
1955-56	—
Total :	<u>11,99,897</u>

These loans, too, were discontinued from 1956-57 onwards.

PAYMENT OF COMPENSATION

Compensation was paid to displaced persons who had abandoned immovable property in Pakistan, after verifying their claims, under the Displaced Persons (Claims) Act, 1950. Interim compensation was sanctioned for certain categories of displaced persons who were in urgent need of relief. The interim scheme was later replaced by the Displaced Persons (Compensation and Rehabilitation) Act, 1954. Under it scaled compensation was prescribed. It gave more to smaller claimants and less to the bigger claimants. This compensation was paid out of the compensation pool, to which the Government of India had contributed.

In this manner the rehabilitation of displaced persons was completed, and now only minor residuary problems remain, e.g. correction of clerical mistakes in allotments or rectification of deficiencies, if any. The Rehabilitation Department has been disposing of surplus evacuee properties purchased by the erstwhile Punjab Government from the Government of India. The properties situated in Haryana are being disposed of by the Tahsildar (Sales), specially appointed, in auctions restricted mostly to Harijans. This process also helps in the detection of usurped properties and their disposal brings in additional revenue to Government.

SOCIO-ECONOMIC BLEND

The rehabilitation of displaced persons proved to be as much the glory of the Punjab as the Partition and the consequent uprooting of millions was its misfortune. The effect of the exchange of population is a phenomenon of great historical importance in the evolution of the socio-economic pattern of life of the people of the Punjab and Haryana, and the Karnal district has had it in abundant measure. The process of change is at various stages in the manifold aspects of life and a complete picture can emerge only after some time. As a result of the Partition, as population in urban areas increased, manifold and new industries sprang up and old ones were expanded. This tended to attract artisans and labourers to a great extent and shopkeepers and others dependent on non-agricultural professions to a lesser extent, from rural areas to towns. A modern township came into existence at Nilu Kheri (Nilo Kheri). This township which is a product of the Partition, later came to be the nucleus of the Community Development Programme which in some ways has revolutionised the country.

The Virks from the Gujranwala and Shekhupura districts, who were allotted land in the district, were maligned in the beginning as professional

thieves and distillers of illicit liquor. Their rough talk and gruff exterior created an impression of aggressiveness. They were ill-equipped and were without security of tenure. But with the quasi-permanent allotment they took to agriculture most earnestly and became an asset to the agricultural economy of the district. Khattris and Aroras from Multan and Muzaffargarh districts, who owned land in the West Punjab, were mostly non-agriculturists and small land holders. They successfully set up themselves as shopkeepers and traders and completely changed the outlook of bazaars and brightened rural life by providing the paraphernalia of civilised life like soap, pottery, mirrors, hair-clips and celluloid toys even to the obscure distant villages.

The energy and resourcefulness displayed by displaced persons influenced local population to shake off its inertia. Local people are now more practical and are very keen to educate their children. The appreciation for cleanliness and the desire for neat clothes, furniture, crockery and other necessary cooking utensils are symbols of a general awakening which has been accelerated by the intermingling of populations.

In the social sphere, there has not been much intermingling and the marriages are strictly confined to the respective communities. The dress habits have, however, undergone a change. The *salwar* and *qamiz* has been adopted by young girls and even some of the grown-up women have started wearing *salwar*. The Jat women are discarding their heavy silver ornaments.

With the lapse of time, the displaced persons have almost completely integrated themselves with the local population of the district. The process of intermixture of dialects is afoot and the Aroras, Khattris and Virks from Pakistan have mastered the local dialect. It is only a matter of time when the older generation passes away and the younger generation takes over and is able to identify itself completely with the life and culture of the new homes in which they were born.



सत्यमेव जयते

Chapter IV

AGRICULTURE AND IRRIGATION

INTRODUCTION

This Chapter deals with vital features relating mainly to agricultural production, which is the basic concern of the majority of people. The problem of greater production of foodgrains and cash crops is intimately connected with the provision of better irrigation facilities on the one hand and measures of flood control on the other. Animal husbandry, fishery and forestry play a subsidiary but an important part in the economy of life. Scientific agriculture coupled with irrigation and other facilities which is fast becoming the life-blood of growing population is dealt with in this Chapter. The difficulties experienced, the developments achieved and the gaps still remaining unfilled present the total picture of this vital sector of the district economy.

LAND UTILISATION

The table below shows the utilisation of land since 1950-51 :

(Thousand hectares)						
Year	Total area according to village papers	Area under forests	Land not available for cultivation	Other uncultivated land excluding fallow land	Fallow land	Net area sown
1950-51	804	2	96	230	86	390
1955-56	802	2	97	166	40	497
1960-61	796	5	93	107	35	556
1965-66	801	10	93	55	24	619
1966-67	801	10	95	54	14	628
1967-68	801	11	94	52	13	631
1968-69	801	11	97	41	33	619
1969-70	803	11	99	40	18	635

According to the figures for 1969-70 the total land of the district measured 8,03,000 hectares of which 11,000 hectares (1.4 per cent) was under forests, 99,000 hectares (12.3 per cent) not available for cultivation, 40,000 hectares (5 per cent) other uncultivated land excluding fallow land, 18,000 hectares (2.3 per cent) fallow land and the remaining 6,35,000 hectares (79 per cent) was the net area sown of which 2,66,000 hectares was sown more than once.

Forests.—As a result of various Government actions, the area under forests which ranged between 1,000 and 2,000 hectares prior to 1951, registered a substantial increase. In 1969-70, 6,026 hectares (excluding avenue strips) of land was under forests as against 2,000 hectares in 1950-51. Avenue strips along railways, canals and roads have been transferred to the Forest Department for purposes of plantation.

Land not available for cultivation.—The area of this category of land, amounting to 99,000 hectares has virtually remained the same. It includes land which cannot be brought under plough except at an exorbitant cost as well as the land covered by buildings, roads and railways, rivers and canals or otherwise appropriated for non-agricultural purposes.

Other uncultivated land excluding fallow land.—This category of land includes permanent pastures and other grazing lands, lands under miscellaneous tree crops and groves not included in net area sown and cultivable waste. As the table shows, such areas have been steadily reduced from 2,30,000 hectares in 1950-51 to 40,000 hectares in 1969-70.

Cultivated area.—In revenue terminology land is termed as cultivated if it had been sown even once during the previous four harvests. Cultivated area comprises current fallows and net area sown. The reduction in the proportion of current fallow land is sufficiently marked as the figures for 1950-51 and 1969-70 would indicate. With the growing trend for intensive cultivation, the practice of taking crops from the same plots successively for a number of years is coming into vogue. In 1950-51, 48.5 per cent of the district area was under cultivation which rose to 79 per cent in 1969-70. Every effort is being made to utilize every strip of land for growing crops despite the pressure of growing population for non-agricultural uses.

Reclamation of cultivable waste.—Reclamation of land for purposes of cultivation has progressed as the following figures pertaining to the area

comprising cultivable waste in 1952-53, 1962-63 and 1966-67 to 1969-70 show :—

Year	Cultivable waste (Thousand hectares)
1952-53	174
1962-63	41
1966-67	29
1967-68	27
1968-69	18
1969-70	17

Water-logging.—Three factors mainly contribute to water-logging¹. It becomes a menace in the un-lined canal irrigated areas due to seepage and in the areas along the drains which overflow during the rainy season. The railways, roads and canals restrict the natural clearance of water during the monsoon which results in the sub-merging of a large area under water. The poor internal and surface drainage also causes water-logging. The water-logged area generally develops into alkaline land where no crops can grow. As a sequence to water-logging, the land is spoiled by *thur*², *kallar* and *sem*³. The extent of damage done by *thur* and *sem* in the district during the period 1962 to 1969 is shown in the following statement :—

		Cultivated	Ex-cultivated	Un-cultivated (never broken)	Total
		(Acres)	(Acres)	(Acres)	(Acres)
1962	<i>Thur</i>	9,874	7,894	69,915	87,683
	<i>Sem</i>	1,235	384	1,671	3,290
	Total	11,109	8,278	71,586	90,973

1. The worst condition of water-logging appears just after rains. The figures of observations of November are, therefore, adopted for calculation of water-logged areas.

2. It is a white or ash-coloured material consisting of harmful salts. It seems to subside after the rains, but the crispness of the crust forming over the powdered earth beneath, betrays its existence. *Kallar* is also classed with *thur*. There is not much to distinguish the one from the other in appearance.

3. The cultivated area which owing to sub-soil moisture has become unfit for cultivation, or is so badly affected that it does not produce more than a four-anna crop, is classed as *sem*.

		Cultivated	Ex- cultivated	Un- cultivated (never broken)	Total
		(Acres)	(Acres)	(Acres)	(Acres)
1963	Thur	11,189	8,363	74,725	94,277
	Sem	427	532	1,256	2,215
	Total :	11,616	8,895	75,981	96,492
1964	Thur	13,337	8,434	74,713	96,484
	Sem	299	461	1,282	2,042
	Total :	13,636	8,895	75,995	98,526
1965	Thur	15,633	10,547	74,173	1,00,353
	Sem	356	652	1,480	2,488
	Total :	15,989	11,199	75,653	1,02,841
1966	Thur	17,212	14,098	73,831	1,05,141
	Sem	243	597	1,383	2,223
	Total :	17,455	14,695	75,214	1,07,364
		(Hectares)	(Hectares)	(Hectares)	(Hectares)
1967	Thur	7,088	7,450	30,181	44,719
	Sem	53	227	509	789
	Total :	7,141	7,677	30,690	45,508
1968	Thur	6,536	8,298	30,258	45,092
	Sem	46	199	493	738
	Total :	6,582	8,497	30,751	45,830
1969	Thur	6,371	9,279	29,649	45,299
	Sem	55	184	440	679
	Total :	6,426	9,463	30,089	45,978

Salinity and alkalinity.—Large tracts of arable land are rendered uncultivable because of salinity and alkalinity¹. It is estimated that in Haryana State about 13 lakh acres (5,26,092 hectares) of land are affected by salinity and alkalinity of which about 5 lakh acres (2,02,343 hectares) are in the Karnal district alone. Reports about the development of salinity and alkalinity in the Karnal district were received as early as 1855 from the area round village Munak. Now large areas of land are lying uncultivated in nearly all parts of the district but the worst affected areas are in the Panipat and Karnal tahsils. Most of these soils have not only high salt but also have high alkalinity (PH. 9.0 to 10.6). Many of these soils have hard pan of cemented *kankar* and clay at a depth of about one metre. The predominant salt is sodium carbonate and bicarbonate with some chloride. The salt affected soils in the district have also high boron content which is difficult to get rid of.

Generally speaking, the total salt concentration in the underground water is not high but at some places and particularly in the Gula (Guhla) tahsil, it contains very high amount of sodium carbonate and bicarbonate. Use of such waters would render the soil unproductive unless amendments are added. The sub soil water in many parts of the district comes to within two metres of the surface during the rainy season, but is below three metres during the summer months. Surface drainage is a problem in these soils on account of their low permeability.

During the last two years, a number of experiments for the improvement and utilization of these soils have been conducted at the experimental farm of the Central Soil Salinity Research Institute, Karnal.² Most of the land of this experimental farm had been lying uncultivated for the last 80 years or so. The experimental work in the Institute has shown that these soils can be made as productive as normal soils, particularly for crops like paddy, wheat, barley, oilseeds and sugarcane if proper technology, based on scientific research, is applied. Detailed investigations for proper utilisation of water resources, particularly with respect to the utilisation of rain-water,

1. A conservative estimate indicates that in India nearly seven million hectares of otherwise productive land are lying barren due to salinity and alkalinity. Such areas are particularly extensive in Uttar Pradesh, Punjab and Haryana, though saline soils also occur in the coastal regions of Maharashtra, Andhra Pradesh, Gujarat, Tamil Nadu, Kerala, Orissa and West Bengal.

2. For the set-up of this institute, see Chapter on 'Other Departments'.

and improving the drainage for different crops are in progress.

IRRIGATION

The district forms part of the region which is liable to frequent droughts.¹ The rainfall is seasonal, inadequate, and subject to frequent variations. Its erratic nature may injure crops and, therefore, it is necessary to have recourse to artificial irrigation.

In 1960-61, 38.3 per cent and in 1969-70, 58.5 per cent of the net area sown was irrigated. This included even those fields which received artificial application of water only once in the year and depended on nature for the rest of the period. A large part of the cultivated area, 61.7 per cent in 1960-61 and 41.5 per cent in 1969-70, was entirely at the mercy of nature for a successful harvest. The variations in rainfall affect the sowing as well as the harvesting of the crops-particularly those of the *kharif* season. The success or failure of the gram crop in particular much depends on such variations. A fair amount of rainfall in the end of June or in the beginning of July leads to an all-round sowing activity, while the failure of rain in the second half of July, August and September results in the scorching of crops.

The artificial supply of water for purposes of agriculture is, therefore, necessary to take advantage of the richness of the soil and to ensure against droughts. Fortunately, there has been no significant physical handicap in the way of developing artificial irrigation. In the western section of the district, where the water-table is nearly 150 feet below the soil surface and well irrigation is not possible, the difficulty has been removed by the construction of canals. In other parts the depth of water-table varies from 5 to 10 feet only and, sometimes, it is even less at places along the main Western Jumna (Yamuna) Canal².

1. Samuel Van Valkenburg, *Agricultural Regions of Asia*, (Part IV-India) *Economic Geography*—Volume I, April 1953, p. 118.

2. The Western Jumna (Yamuna) Canal includes Main Line Upper from Tajewala to Dadupur, Main Line Lower from Dadupur to Indri and Main Branch from India to Munak.

The progress of irrigation during 1960-61, 1966-67 and 1969-70 is given below :

Tahsil	(Thousand hectares)		
	Net area irrigated		
	1960-61	1966-67	1969-70
Karnal	52	54	66
Panipat	45	46	47
Thanesar	23	25	89
Kaithal	93 ¹	159 ¹	113
Gula (Guhla)			56
Total :	213	284	371

Panipat tahsil benefits both from canals and wells. The Western Jumna (Yamuna) Canal traverses the tahsil and the nearness of the water-table favours well irrigation. Karnal tahsil has a similar advantage, but to a lesser degree. In the western portion of the tahsil the water-table falls to a considerable depth with a consequent decrease in irrigation from wells. Areas not covered by canals remain unirrigated. In Kaithal tahsil where the water-table is about 150 feet deep, canals are the only means of irrigation. The Ghagghar, the Saraswati and their tributaries cause floods in Gula (Guhla) tahsil and water stagnates for months together preventing most of the *rabi* sowings. Thanesar area is also frequently flooded in the rainy season. As the slope provides a quick flow of water, the flooding thus compensates the deficiency of irrigation.

Development of irrigation.—The net area under irrigation increased from 213 thousand hectares in 1960-61 to 371 thousand hectares in 1969-70. This increase has been due to the construction of Narwana Branch of Bhakra Main Line and feeding of the Sirsa Branch and the Saraswati Canal from the perennial canal of Bhakra Main Line and also to the installation of tubewells.

1. The figure for the Gula (Guhla) tahsil is included in the Kaithal tahsil for the former till August 13, 1968, was a sub-tahsil of the latter.

The table below shows the net area irrigated in the district during 1960-61 to 1969-70 by different means of irrigation:

Year	(Thousand hectares)				
	Net area irrigated				
	Govern- ment canals	Tanks	Wells	Other sources	Total
1960-61	123	2	88	—	213
1961-62	122	2	89	—	213
1962-63	134	2	91	—	227
1963-64	155	2	94	—	251
1964-65	155	2	94	—	251
1965-66	155	1	94	—	250
1966-67	192	1	91	—	284
1967-68	196	1	90	—	287
1968-69	162	1	154	—	317
1969-70	161	1	209	—	371

IRRIGATION FACILITIES

The irrigation system of the district can be divided into two main categories, viz. river works and lift irrigation represented respectively by canals and wells. Another mode is storage tanks and reservoirs. The canals do not cover the whole area and, even in the area so covered, the intensity of irrigation is not sufficient to produce two to three crops annually which is an essential requirement for adequate food production. The next source of irrigation is ground-water reservoir which generally exists under all the alluvial soils and is tapped according to its suitability and the depth at which water is available. The wells and tube-wells are sunk into the ground and water is lifted by different means. Tank irrigation, though prevalent in some parts of the district, is not much in vogue.

CANAL IRRIGATION

The canals form the chief means of irrigation in the district. The source for supplies of canal irrigation is river Yamuna (perennial)

and the streams like the Chautang and Saraswati (non-perennial). The Western Jumna (Yamuna) Canal is the oldest canal in the State. Dug originally during the reign of Firuz Shah to conduct water to the Royal Gardens at Hisar (Hissar) and Hansi, it incidentally irrigated the intervening tracts also. It was re-excavated in Akbar's reign for supplies from the Yamuna and Somb into the Chautang and on to Hansi and Hisar (Hissar). This was a perennial canal as is testified by the ancient bridges at Karnal¹ and Safidon (district Jind). It was further improved in c.A.D. 1643 during the reign of Shah Jahan by Ali Mardan Khan with the object of diverting water to Delhi. The river supply was tamed about 22.5 kilometres below the present head-works of the canal and the water was led along the drainage line through Panipat and Sonipat (Sonepat) to Delhi. During the decline of the Mughal empire the canal which by then was known as Shah Nahar gradually silted up.

In 1821, a small instalment of the waters of the Yamuna was diverted into the Delhi Canal and the original alignment was adhered to. This alignment was, however, by no means satisfactory and as early as 1846 it was noticed that the concentrated irrigation, the defective drainage and the high banks which cut off the flow of natural drainage of the country, all contributed to the rapid deterioration of the soil and decline in the health of the people. Saline efflorescence was rapidly spreading and the inhabitants of the water-logged area suffered from chronic disorders of liver and spleen². General Strachey, in 1867, described the canal area in the following words :—

“The portion of the canal near Karnal is a disgrace to our administration, and has been for years past. It creates most pestilential swamps which must be got rid of, unless we are content to perpetuate this abominable nuisance, which has been talked about for the last 25 years, during which period no serious attempt has been made to abate it. For my own part, I distinctly reject all share in any counsel which tends to delay in meeting this most crying evil. I most fully admit the great importance of doing what has to be done with the most scrupulous regard to economy, and I am ready to sacrifice all thought of elegance or congruity for the purpose of avoiding any considerable outlay, which is really not needed to secure efficiency.

1. This old bridge called the Mughal Bridge (*Badshahi Pul*) on the Grand Trunk Road (N.H. 1) was abandoned in 1972.

2. *Imperial Gazetteer of India—Provincial Series*, Volume I, 1908, pp. 202-03.

But it is impossible for me to affirm, with too great positiveness, the moral obligation which rests on our Government to put an end, with all possible speed, to the discreditable condition of the large tracts of land along the Western Jamna Canal, which are converted into swamps of the most pestilential nature, not only destructive to the health and life of the population, but occupying in a manner for worse than useless some of what might be the very best lands. It will be necessary to do something, and what is necessary should not be delayed till other works, which have no relation to this part of the scheme, are completed.”¹

It was only in 1885 that the old canal (Wazir Khan Mughal Canal) was closed, and relegated to a position of a drainage line, and the new re-aligned canal was opened. This irrigation work piercing the district, came to be known as Western Jumna (Yamuna) Canal.

There was sharp increase in irrigation between 1895 and 1900 due to the opening of the Sirsa Branch of the Western Jumna (Yamuna) Canal in 1890 and the Nardak Major Distributary in 1898. Since the western portion of the district was not well provided with irrigation means, the Saraswati Inundation Canal was opened in the thirties of the present century.

Western Jumna (Yamuna) Canal had long rotational closures during *rabi* and thus formed a limiting factor in the extension of area under *rabi* food-grains. The Saraswati canals, being inundation canals, were also non-perennial. To remove this deficiency, the Narwana Branch from the Ist Bhakra Main Line was linked up with the Saraswati Canal and the Sirsa Branch in 1954-55, so as to feed and make them perennial. A brief description of the canals irrigating the district is given below:²

Western Jumna (Yamuna) Canal.—The canal takes off from the Yamuna at Tajewala headworks (Ambala district) where a very strong masonry weir is built across the river. Between Tajewala and Dadupur the canal follows for the most part an the old river-bed. The slope is fairly steep, and the current very strong. At Dadupur there is a level crossing over the combined Pathrala and Somb torrents. From Dadupur the canal flows south in

1. *Karnal District Gazetteer*, 1883-84, pp. 272-73.

2. A reference to the economic map appended to the volume will illustrate the course of the canals irrigating the district.

an artificial channel to Buria, below which a remarkable spur of the Bangar high lands forces it to make an abrupt curve to the east. During the rest of its course in Jagadhri tahsil (Ambala district) it hugs the Bangar bank (the old high bank of the Yamuna) pretty closely, and flowing south-west passes below the railway bridge at Abdullapur (Yamunanagar) and finally leaves the tahsil at Daurang. After about 61.46 kilometres below Dadupur, there is a regulator at Indri¹ with lock and escape head where the canal bifurcates into Sirsa Branch² and Main Branch. About 49.9 kilometres further down at Munak the Main Branch bifurcates into the Hansi Branch, Delhi Branch, and the Gohana Distributary.

The Main Line Upper up to Dadupur was graded by the interposition of a number of falls and the old river creeks were canalized in a properly designed channel under the 1942 project. Two-thirds of the Yamuna water as is available for irrigation is taken as far as Indri in one united stream. Two falls combined with village-road bridges were constructed at Zainpur (R.D.³ 1,75,950) and Badarpur (R.D. 1,59,000) during 1942. Another 3.5 foot fall combined with a village-road bridge has been constructed at R.D. 1,14,000 under Remodelling of Western Jumna (Yamuna) Canal Project, 1959. These falls reduce the slopes and meandering. For providing a passage for the flow of natural drainage, syphons have been provided at R.D. 1,57,000 and R.D. 1,11,250 on the Main Line Lower.

The capacity of Main Line Lower was raised to 8,050 cusecs in 1943 after the head regulators at Tajewala and Dadupur had been remodelled for such a discharge. The capacity was again raised to 9,000 cusecs in 1952 and finally to 12,000 cusecs.

The Main Line Lower is navigable [raft-flow up to Yamunanagar (Ambala district)]. The Chautang feeder, taking off at Indri head regulator, feeds the Chautang Canal System in order to ensure proper supplies during *kharif*. Between Indri and Munak where the Hansi Branch strikes westward to irrigate Jind and Hisar (Hissar), several subsidiary channels are given off. Fed by the torrents of the Rakshi and Chautang streams, the Chautang Canal System mainly consists of inundation canals. The Chautang canals irrigate Karnal tahsil through Rambha, Rakshi, Chautang, Saidpur, Sambhi,

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1. As far as Indri the alignment of the old Badshahi Canal is followed.
 2. Sirsa Branch has a capacity of 2,800 cusecs and runs for 126 kilometres, watering the arid tract of the country between Indri and Sirsa.
 3. R.D. stands for running distance in foot.

Gitalpur and Gholpur minors/distributaries. Gogripur and Kheri distributaries, constructed in 1956 and 1957, respectively, have been taken out at R.D. 700 right of Karnal Mill Channel and R.D. 27,200 left of Main Branch on account of construction of the N.B.K. (Narwana Branch Karnal) Link. Gogripur distributary now takes off at R.D. 85,358—R and the reach R.D. O—3000 has since been abandoned.

Nardak distributary, constructed in 1897-98, takes off (R.D. 58,400—R) the Main Branch at Uchana and irrigates Nardak tract of the Karnal and Kaithal tahsils. The capacity of this distributary was increased from 370 cusecs to 488 cusecs under the Revised Western Jumna (Yamuna) Canal Project, 1959. The distributary was cut off by the construction of the N.B.K. Link at R.D. 27,000. It was, however, provided with a regulator below N.B.K. Link. The cut-off distributary is now fed from the N.B.K. Link through Sirsa Branch. The old Nardak distributary takes off at R.D. 19,400. The Budha Khera and Karnal distributaries irrigate land in the vicinity of Karnal town. The Goli distributary taking off above the regulator at Munak irrigates a few villages in the south-west part of the tahsil.

The main supplies of canal water for the Panipat tahsil are drawn from the Delhi Branch and the Hansi Branch which bifurcate at Munak on the borders of the Karnal tahsil. The Delhi Branch through its main distributaries, Naraina, Israna, Samalkha and Hulana, irrigates the greater part of the Bangar circle. The Samalkha distributary was taken out at R.D. 98,600 left from the Delhi Branch to irrigate the Panipat tahsil in 1955. The Joshi distributary and Butana sub-branch of the Hansi Branch serve the villages of the Jind district bordering the Karnal and Rohtak districts respectively.

The Bazida distributary, taking off at R.D. 94,600 left Main Branch at Ghogripur, serves the centre of the Karnal tahsil and extends to the villages in Panipat. The distributaries of the Delhi Branch are the most satisfactory in their working. They are controlled from Binjhaul, the headquarters of the Panipat canal sub-division.

The Sirsa Branch which was opened in 1890 was taken out of the main canal at Indri and strikes due west. No irrigation was done from this main canal in the Karnal tahsil, but the Habri sub-branch which takes out at Budhera irrigates a few villages in the Karnal tahsil. With the construction of Bhakra Dam, the area which was served by the Sirsa Branch below R.D. 88,000 (Budhera) is fed by Bhakra waters through Narwana Branch. The Sirsa Branch (R.D. 0—88,000) from Indri to Budhera is run from the Western Jumna (Yamuna) Canal during the monsoon when there

are surplus waters. The Bhakra supplies are accordingly reduced to conserve water in the dam. The supplies thus made available by this transfer have been utilised for the extension of irrigation in the Karnal and Rohtak districts. The most important factor in the development of the Nardak and Bangar circles is, of course, the opening of the Sirsa Branch which runs from north-east to south-west parallel to and about 6.5 kilometres to the south of Kaithal-Thanesar road. The Shudkan distributary and the Habri sub-branch irrigate the country between the Sirsa Canal and the drainage line of the Chautang which was formerly the boundary of the territory belonging to the Bhai of Kaithal. The villages lying to the south-east of drainage line were without irrigation until the opening of the Nardak distributary in 1898. All these distributaries have been aligned on the most approved principles, and when clear of silt their command of the irrigation area is almost perfect.

The Sirsa Branch irrigation is controlled by the Sub-Divisional Officer at Mundri. The Nardak distributary is under the immediate charge of the Sub-Divisional Officer, Nardak Sub-Division, Karnal. The southern villages of the tahsil bordering Jind are irrigated from the Moana distributary of the Hansi Branch which gives excellent supplies.

The area of the district irrigated by the Western Jumna (Yamuna) Canal and its branches is given below :

Year	Karnal tahsil	Kaithal tahsil	Panipat tahsil	Thanesar tahsil	Total for Karnal district
	(Acres)	(Acres)	(Acres)	(Acres)	(Acres)
1957-58	1,00,193	2,20,430	47,523	—	3,68,146
1958-59	84,636	48,308	40,848	—	1,73,792
1959-60	93,882	50,044	53,297	—	1,97,223
1960-61	1,02,520	41,831	51,521	—	1,95,872
1961-62	1,06,665	47,987	51,259	—	2,05,911
1962-63	1,07,710	49,758	47,999	—	2,05,467
1963-64	1,09,422	49,996	48,267	—	2,07,685
1964-65	1,14,857	47,823	51,102	—	2,13,782
1965-66	1,14,828	44,776	64,067	—	2,23,671
1966-67	1,25,284	54,178	68,717	—	2,48,179
1967-68	1,27,469	55,571	63,216	—	2,46,256
1968-69	1,25,344	38,977	57,745	—	2,22,066
1969-70	1,38,972	51,433	61,826	—	2,52,231

Narwana Branch of Bhakra Main Line.—The canal was excavated in 1954 and feeds the Sirsa Branch of Western Jumna (Yamuna) Canal and Saraswati Canal so as to make them perennial canals. With the opening of this canal the load on the Western Jumna (Yamuna) Canal has been reduced and the supply has become regular in other distributaries of the latter canal. The Saraswati Canal System which constituted the inundation canals was opened in the beginning of the present century. The canal irrigated the western portion of the district only during the rainy season when the water in the Saraswati was sufficient to feed the canal. In 1954-55, the Saraswati Canal began to be fed by Narwana Branch of the Bhakra Canal and became a perennial one. The area of the district irrigated by the Narwana Branch and its distributaries is as follows :—

Year	Karnal tahsil	Kaithal tahsil	Panipat tahsil	Thanesar tahsil	Total for Karnal district
	(Acres)	(Acres)	(Acres)	(Acres)	(Acres)
1957-58	1,643	96,038	—	11,824	1,09,505
1958-59	1,855	1,14,075	—	14,275	1,30,205
1959-60	2,110	1,21,853	—	13,555	1,37,518
1960-61	1,839	1,14,615	—	12,739	1,29,193
1961-62	2,222	1,48,481	—	12,047	1,62,750
1962-63	2,355	1,13,615	—	12,267	1,28,237
1963-64	2,821	1,39,758	—	12,761	1,55,340
1964-65	2,893	1,32,486	—	13,642	1,49,021
1965-66	3,804	1,60,993	—	16,996	1,81,793
1966-67	3,827	1,70,015	—	15,607	1,89,419
1967-68	3,783	1,71,358	—	14,900	1,90,041
1968-69	3,479	91,248	—	16,408	1,11,135
1969-70	3,143	89,859	—	16,185	1,09,187

Narwana Branch Karnal (N.B.K.) Link.—The new-lined branch canal was constructed in 1959-60 to pass Bhakra waters to the Gurgaon Canal System, Delhi Water Supply and Delhi Power Station through the Western Jumna (Yamuna) Canal. It takes off at Budhera from the left bank of the Sirsa Branch and joins Main Branch of the Western Jumna (Yamuna) Canal at R.D. 80,050. Having a capacity of 2,716 cusecs, it is only a feeder or link channel.

Sirsa Branch.—The Sirsa Branch was opened in 1890. It takes off from the Western Jumna (Yamuna) Canal at Indri. This canal irrigates the western portion of the district. It was not perennial because with the receding of the flow in the Yamuna all the distributaries of the Western Jumna (Yamuna) Canal could not be fed at the same time. Hence the different distributaries were run alternately. In 1954, the Narwana Branch of the Bhakra Main Line was excavated with its outfall into the Sirsa Branch near Budhera, a village ten kilometres south-west of Thanesar and this made the latter perennial.

The total irrigation by the Sirsa Branch in the district is as follows :—

Year	Karnal tahsil	Kaithal tahsil	Panipat tahsil	Thanesar tahsil	Total for Karnal district
	(Acres)	(Acres)	(Acres)	(Acres)	(Acres)
1957-58	..	..	—	—	..
1958-59	13,115	1,56,782	—	—	1,69,897
1959-60	13,806	1,67,347	—	—	1,81,153
1960-61	16,102	1,38,369	—	—	1,54,771
1961-62	17,252	1,54,712	—	—	1,71,964
1962-63	17,318	1,62,602	—	—	1,79,920
1963-64	19,497	1,84,575	—	—	2,04,072
1964-65	22,965	1,71,426	—	—	1,94,391
1965-66	24,595	1,72,316	—	—	1,96,911
1966-67	24,477	1,97,888	—	—	2,22,365
1967-68	25,407	1,93,417	—	—	2,18,824
1968-69	24,939	1,74,244	—	—	1,99,183
1969-70	26,049	2,00,252	—	—	2,26,301

WELL-IRRIGATION

Next in importance to canals, as a source of irrigation, are ~~percolation~~ wells. There is a direct and intimate co-relation between the sub-surface water supplies and the means for tapping them for purposes of agriculture. Throughout the eastern portion of the district, the water-table does not fall below 10 feet, while it shows an abrupt fall in the west, particularly in the Kaithal tahsil. The number of wells varies according to the depth of the water-table. It is the largest in the southern portion of the Panipat tahsil because of the nearness of the water-table. The number decreases as one proceeds towards the western side of the district.

Kaithal occupies the first place in Haryana in respect of the net well irrigated area. During 1969-70, an area of 209 thousand hectares was irrigated from wells. Water is almost invariably raised either with manual labour or by using bullocks. Different methods of well irrigation are devised according to the depth of sub-soil water and employed in the district as shown below :

Dhingi.—The lever contrivance for raising water with manual labour is known as *dhingi*. It is not a very popular device and is mainly practised in Thanesar, and Indri Khadar circle. The water is lifted by means of a bucket suspended with a long rope, tied to one end of a long wooden bar. The bar is pivoted on a perpendicular post to form a sort of see-saw. The height of the post depends on the depth of water. The bar is not pivoted at the centre in order to make one portion short. There is also adjustment to allow the bar to revolve on a vertical plane for emptying water from the bucket into the water channel. The short end of the bar is weighted so as nearly to counter-balance the weight of the long arm and bucket full of water. The bucket is lowered by the man in charge, who draws the long end of the lever by a pull at the rope. This method is normally used for a lift of about 15 feet (4.6 metres) or less.

Charas or Mot.—This consists of a large leather bag (*charas*) holding 30 to 40 gallons of water, fastened to one end of a rope which passes over a small strong wheel (*bhaun* or *chak*) fixed over the well. When the bag has been lowered, the other end of the rope is attached to the yoke of a pair of bullocks who then walk down a ramp of a length approximately equal to the depth of the well. The driver sits on the rope near the yoke to keep it in position. By the time the bullocks arrive at the end of the ramp, the bag has been drawn up to the top of the well, and its water is emptied into a cistern, generally by a man who stands by, but sometimes by a self-acting

mechanical arrangement. The rope is then detached from the bullocks, the bag is lowered again and the bullocks return by a less steep incline parallel to it, and the operation is recommenced. Before the construction of the Saraswati Inundation Canal, this method was quite common throughout Bangar-Pehowa circle but this slow and time-consuming process of irrigation is gradually diminishing and is now rarely seen in villages.

Harat, Well-gear or the Persian wheel.—The alternative to the *charas* is *harat* or the persian wheel. It consists of a continuous chain of buckets, passing over a vertical wheel fixed over the top of the well and rotated by means of a wooden or an iron gear which is worked by a pair of bullocks walking round a circular tract called *perd*.¹ This device is used extensively in eastern portion of the district, viz. the Thanesar, Karnal and Panipat tahsils.

Well irrigation is mainly a function of private enterprise. The State only encourages their construction by agricultural loans and by liberal rules in the matter of land revenue assessment. The Government grants *taccavi* loans up to the extent of Rs. 2,000 for sinking a new well and Rs. 500 for repairing an old and abandoned one. Whenever there is scarcity, the supply of cement at controlled rates and of bricks through approved kiln contractors is also arranged. The following table shows the number of wells sunk/repaired during 1951—69 at private expense and on receipt of

1. Ibbetson wrote in the seventies of the last century :

“The Persian wheel or *harat* consists of a horizontal cogged wheel driven by bullocks yoked to a beam (*gadal*) fixed to its vertical axis (*balaar*). This wheel gears into and drives a vertical toothed wheel (*chakli*), half of which is under ground, and the horizontal axle of which (*belan* or *lat*) projects over the well. On this axle and over the well is fixed a vertical lantern wheel (*har* or *od*) on which hangs the *mal*, a sort of rope ladder made of two side ropes and cross sticks. To the cross sticks are tied the earthen vessels (*tindar*) which raise the water. As they come up they discharge the water through the lantern wheel into a water trough (*nisar*) inside the wheel, which returning on itself twice at right angles, passes out of the wheel, on the outer side, or that further from the centre of the well, where there are no spokes, and delivers the water into the cistern (*parcha*), whence it flows off by small channels (*khand*) to the fields.” (*Report on the Revision of Settlement of the Panipat Tahsil and Karnal Parganah of the Karnal District, 1872-80, p. 160.*)

Since then there has been no change except that the earthen vessels have been replaced by the iron buckets.

taccavi :—

During the year ending <i>rabi</i>	New wells sunk		Old wells repaired	
	At private expense	From <i>taccavi</i> advanced	At private expense	From <i>taccavi</i> advanced
1951	15	178	20	37
1952	—	81	—	9
1953	11	58	15	15
1954	63	33	17	7
1955	21	55	25	23
1956	29	52	25	20
1957	25	39	12	10
1958	21	46	9	16
1959	15	64	34	11
1960	20	65	29	51
1961	10	130	11	27
1962	7	22	9	15
1963	11	27	17	19
1964	8	33	20	17
1965	21	24	4	10
1966	4	16	19	12
1967	28	35	30	21
1968	41	20	25	..
1969	—	—	45	..

Tubewells.—Tubewells and pumping sets were introduced after 1947. They serve to reduce the water-logging, check the rise in the water-table and irrigate lands. As against ordinary wells, tubewells tap deeper layers of underground water. They are becoming increasingly popular for the ordinary

wells give only a small discharge up to 0.15 cusecs as against 1.50 cusecs of a Government tubewell. The following comparative data present an interesting study:—

Well irrigation device	Approximate cost	Capacity for irrigation
	(Rs.)	(Acres)
Pakka open well	2,500 to 3,000	5
Well with pumping set	Cost of well plus 3,500	25 to 30
Private tubewell	5,000 to 6,000	50 to 60
Government tubewell	80,000 to 1,00,000	300 to 400

The installation of tubewells varies from one area to another according to the availability of electrical energy. Since it is more economical to work a tubewell with electrical energy than with diesel, there are fewer tubewells in areas where electricity is not yet available. Government provided 429 tubewells during the First and Second Five-Year Plans. Tahsil-wise distribution of these tubewells is as follows :—

Tahsil	Number of tubewells
Panipat	65
Thanesar	288
Karnal	76
Total :	429

Besides, 24,550 tubewells were energised by March 31, 1970. The district, by March 31, 1971, had 3,868 pumping sets (1,746 run by diesel and 2,122 run by electric energy) and 34,112 tubewells (8,881 run by diesel and 25,231 run by electric energy).¹ The tubewell irrigation has popularised sowing of cash crops like vegetables, sugarcane and cotton.

TANK IRRIGATION

Tank as a means of irrigation is prevalent only in some parts of the Karnal and Thanesar tahsils and does not play any significant role in the

1. According to the information supplied by the Divisional Soil Conservation Officer, Karnal, the Karnal District topped among all other districts in the State in minor irrigation facilities. On June 30, 1971, this district alone had 35,000 tubewells out of a total of 90,000 tubewells in the State. The tubewell irrigated area in the district was 2,87,800 hectares as against 1,61,400 hectares of canal irrigated area.

agricultural economy of the district. In 1969-70 only 1,000 hectares of land was under this type of irrigation.

FLOOD-EMBANKMENTS AND MARGINAL BUNDS

Flood-embankments and marginal bunds are constructed to confine a river in prescribed reach and stop its water from flooding the adjoining area. As per agreement with the Government of Uttar Pradesh, no major flood-embankment can be constructed on the Yamuna unless approved by the Yamuna Committee.¹ Flood-embankments and marginal bunds have, however, been constructed on the Ghagghar, the Tangri and the Markanda.

Thanesar Bund, Bibipur Bund and Kanthala Bund.—All the three bunds were constructed in 1895-96 and form a 'C' shaped enclosure on the southern, south-western and western sides of the depression called the Bibipur Lake. This lake impounds the water of the Saraswati and part of the water of the Markanda, which is diverted into Bibipur Lake. This water is used for the irrigation of rice cultivation during the *kharif* season, and the surplus water escapes through the Saraswati Drain which outfalls into the Ghagghar.

Ghagghar Bund.—It was constructed in 1954-55 as a safeguard against floods. This bund prevents the spilling of the left side of the Ghagghar and saves villages namely, Urlana, Kasaur, Bhatiyana, Sadar Heri and Tityana of the Gula (Guhla) tahsil. It is about 30 miles (48 kilometres) long and a portion of it also lies in the Patiala district (Punjab).

Tangri Diversion Bund.—It is on the left side of the stream and is constructed near Jharauli village. The bund saves the villages Nalwi, Basantpur, Bijharpur, Kurri and Dalla Mazra of the Thanesar tahsil from a heavy spill. It also protects the villages of Thaska Miranji and Thol and the Thaska distributaries.

Right Marginal Bund, Markanda.—This bund is constructed on the right side of the Markanda from Jhansa (tahsil Thanesar). Its length is about 29,200 feet (8,900 metres) and the whole of it lies in the Karnal district. The bund has been constructed to check the overflow of river Markanda. It protects irrigation channels and also the village of Thaska Miranji.

1. It is an inter-State body consisting of representatives of the Haryana, Uttar Pradesh and the Government of India. Its Chairman is the Chief Engineer Floods, Central Waters and Power Commission, Government of India.

Left Marginal Bund, Markanda.—This bund is constructed on the left side of the Markanda, Shahabad (Shahbad) to Jhansa, and is about 10 miles (16 kilometres) long. The bund checks the spills of the stream on its left.

Markanda Distributary Bund.—The Markanda distributary is quite near to the river and its right bank is strengthened properly to serve as a bund.

AGRICULTURE

As in the past, agriculture constitutes the main economy and is the mainstay of the majority of the people inhabiting the Karnal district. After Independence, most of the area fit for cultivation has been brought under plough and the district has made spectacular progress in the field of agriculture after the creation of Haryana in November 1966. This can be gauged from the fact that in 1969-70 the foodgrain production registered an increase of 84 per cent (118 per cent increase was recorded in the case of wheat) over 1966-67. It is expected that an overall 8 per cent growth rate in agriculture may be achieved in this district as compared to an all-India growth of 5 per cent to be attained in this sector by the end of the current Fourth Five-Year Plan (1973-74).

Set up of the Agriculture Department.—Prior to March 1967, the district was included in the Agricultural Circle, Hansi. The circle comprised a number of districts, each under the charge of a District Agricultural Officer. Since March 1967, Intensive Agricultural District Programme¹ has been started in this district and it is now under the charge of a Deputy Director, Agriculture. He is assisted by a team of specialists of different subjects which includes one Deputy Registrar, Co-operative Societies, one Statistical Officer, one Agricultural Engineer, one Assistant Agricultural Engineer, Subject Matter Specialists (one each for Agronomy and Farm Management, Plant Protection, and Fertilizers and Soils), one Agricultural Information Officer, one Training Officer and other Gazetted and Non-Gazetted staff including the field staff, viz. Agricultural Inspectors, Fieldmen and Co-operative Inspectors.

The Agriculture Department guides the farmers in the latest technological advances in agricultural production. These include intensive

1. Karnal is the only district in the State selected for this programme. Popularly known as the Package Programme it "aims at a break-through in agriculture and its raising its production potential. An integrated and intensified approach is envisaged for maximising agricultural production in the shortest possible time. It seeks to introduce new techniques of modern farming, or lent current practices, emphasise pooling and utilisation of available resources and strengthen them wherever possible." (B.K. Sinha, *Co-operatives in India*, 1968, p. 93.)

methods of cultivation for higher production per unit area through new cropping patterns suited to their conditions. These also comprise preparation of crop plans, control of various pests and diseases affecting agricultural crops and gardens, use of fertilizers and good seeds, and laying out of demonstration plots to show to the cultivators the superiority of new strains and agronomic practices recommended for the district. The Agricultural Inspectors impart training and education to the farmers in their respective areas on matters relating to improved technique resulting in better management for getting more production, use of improved seeds, fertilizers, improved agricultural implements and appropriate agricultural practices.

SOILS

In general, the soils of the district on which so much of the success of agriculture depends are sandy loam to loam in texture. According to physical characteristics, these soils may be divided as below :

Sandy.—These soils, locally called *retli dharti*, are found mostly near the banks of river Yamuna and other streams traversing the district. Little cultivation is possible in sandy areas.

Clay.—These soils, locally called *dakar*, are found in Naili and also in patches in other parts of the district. The clods of clayey soils are not easily broken. These soils do not yield autumn crops and the tillage for *rabi* crops is per force rough, for the land can only be ploughed immediately after heavy floods. If once the surface dries, nothing can be done with it. If properly managed, these soils are very suitable for paddy which is becoming one of the major crops of the district.

Kallar or Rehi.—These soils are found in stretches of varied extent almost throughout the district. The general appearance of the landscape of these soils is just like a white floor with brownish-black background having alkaline salts of 3 to 4 inches depth over the surface. The soils have, in general, an alkaline reaction. The reclamation of *kallar* soils calls for the lowering down of excessive salts by flooding and rice-*berseem* cultivation preceded by green-manuring with *dhaincha*. In the soils with high alkalinity, the application of gypsum or press-mud (a waste product of the sugar mills) also proves beneficial.

In general, the soils are deficient in nitrogen and organic matter, but the phosphorus content ranges from low to medium. It is, therefore, evident that, for obtaining good yields, the soils need heavy manuring with nitrogenous and phosphatic fertilizers. It is further obvious that on account

of the deficiency of organic matter, the soils be also treated with organic matter like farm-yard manure, compost and green-manure. For the improvement of alkaline soils green-manuring occupies an important place in the development of agricultural programme.

The menace of alkalinity and salinity is constantly increasing due to the rise in the water-table and because of defective drainage. Low soil fertility, salinity, alkalinity and water-logging are the major problems affecting the crop yields in this district.

CROPS

The crops grown in the district are divided into two main categories, viz. *kharif* and *rabi*, locally named as *samnu* and *sadhu*. The former is the summer season harvest and the latter the winter season harvest. Any crop which does not strictly fall within these two harvests is known as a *zaid* crop and its harvest is called the *zaid kharif* or *zaid rabi*, according to the harvest with which it is assessed. *Toria* (an oil-seed) is cultivated as *zaid kharif*; vegetables, melon, tobacco and green fodder as *zaid rabi*.

The major *kharif* crops are sugarcane, cotton, paddy and maize, while the minor ones or subsidiary crops are chillies, *bajra*, *kharif* pulses (*moong*, *mash* and *moth*), *kharif* vegetables, *til* and *sani*. The major *rabi* crops are wheat, gram, barley and *rabi* oilseeds (*sarson*, *rai* and *taramira*) while the minor ones are *berseem*, *methi*, potato, onion and other winter vegetables.

Tobacco, potato, onion, chillies, vegetables, cotton and sugarcane are the main cash crops of the district. Vegetables are generally cultivated around the towns where there is comparatively greater demand for them.

Table IX of Appendix gives details about the sowing and harvesting of *kharif* and *rabi* crops ; Table X shows the area under principal crops ; Table XI, the yield per hectare and Table XII, the production of principal crops from 1961-62 onwards.

FOODGRAIN CROPS

Rice (Paddy).—Paddy cultivation in the district has increased considerably. In 1950-51, the area under this crop was only 40 thousand hectares. It rose to 102 thousand hectares in 1961-62, 138 thousand hectares in 1967-68 and 155 thousand hectares in 1969-70. The district tops in the production of rice in the State. The main producing area are the Thanesar, Karnal, Panipat and Gula (Guhla) tahsils. The increase has been relatively more in the areas

traversed by the main Western Jumna (Yamuna) Canal, and is largely attributable to rise in the water-table and alkalinity which, however, have assumed in certain areas the shape of a menace. The popular varieties grown are :

High yielding : T.N.I., IR 8 and IR 8-68

Local improved : *Jhona* 349 and *Jhona* 351, *Basmati* 217 and *Basmati* 370

Maize.—It is the second major *kharif* foodgrain crop of the district. The area under this crop during 1969-70 was 50 thousand hectares as against 34 thousand hectares during the previous year and only 13 thousand hectares in 1950-51. Thus, the increase in the acreage of this crop, since 1950-51, has been about four times. Maize is grown almost all over the district except in areas where paddy and *bajra* are the main *kharif* crops. The main varieties grown are Hybrid: Ganga 5, Composite : Vijay and Sona. But the major area still continues to be grown with local varieties.

Bajra.—*Bajra* is mostly grown in the *barani* areas of Kaithal tahsil. It constitutes an important item of food during the winter season. In the south-western portion of the district, it is cooked almost every evening for dinner and is preferred to wheat and gram. Consequent upon the introduction of new varieties specially hybrid *bajra*, the area under this crop is likely to increase in future. It shows variation from year to year and was 48 thousand hectares during 1967-68, 30 thousand hectares in 1968-69 and 50 thousand hectares in 1969-70, depending upon timely rains. Varieties recommended for this district are : Hybrid Bajra No. 1, and Hybrid Bajra No. 4.

Wheat.—This is the principal *rabi* foodgrain crop. It is grown mostly under irrigated conditions, and is the leading crop of the district. The area under this crop increased from 95 thousand hectares in 1950-51 to 242 thousand hectares during 1967-68 and 322 thousand hectares in 1969-70. The progressive increase in its acreage is largely due to increase in the irrigated area of the district, assured production and the introduction of new local and exotic high-yielding varieties. The main varieties grown in the district are : C 281, C 273, C 306, PV 18, Kalyan, Sona and Sonalika.

Gram.—This is also an important *rabi* foodgrain crop. It forms a good diet both for human beings and cattle. It is consumed right from the time of germination to grain development stage and is used for a variety of purposes. It is mostly grown under *barani* conditions and therefore its

acreage shows wide variation from year to year. The area under this crop during 1969-70 was 95 thousand hectares as against 101 thousand hectares in the previous year and 121 thousand hectares in 1967-68. It had reached the highest figure of 207 thousand hectares in 1960-61. The important varieties grown in the district are Pb. 7 and S 26.

Barley.—The area under this *rabi* crop has, like wheat, shown significant increase since 1950-51 when it was grown only on an area of five thousand hectares. During 1967-68 it was 41 thousand hectares. The increase was due to regular supply of irrigation water at the time of sowing and alkalinity as barley does better than wheat on alkaline soils. However, with the reclamation of alkaline and saline soils and the introduction of better yielding varieties of wheat, the area under this crop has decreased. It was 31 thousand hectares in 1968-69 and 18 thousand hectares in 1969-70. The main varieties of this crop sown in the district are : C 138 and C 164.

COMMERCIAL CROPS

Sugarcane.—It is an important cash crop of the district and is grown mostly under irrigated conditions. The area under this crop rose from 13 thousand hectares in 1950-51 to 51 thousand hectares in 1965-66 but it decreased in subsequent years to 32 thousand hectares in 1967-68. Similar figures for 1968-69 and 1969-70 are 37 and 45 thousand hectares respectively. The increase could be attributed to several factors including the installation of sugar factory at Panipat. The decrease has been due to the introduction of better yielding varieties of foodgrains, red rot disease and low selling price of sugarcane. The main varieties sown in the district are : Co. 453, Co. 312, Co. 1148, Co. L 29 and Co. L 9. Emphasis is being laid on covering large areas with early varieties Co. L 29, Co. L 9 ; mid-season variety Co. 975 and late variety Co. 1148 so as to extend the factory season.

Cotton.—It is an important cash crop of the Kaithal tahsil. The crop has two varieties, *viz.* *Desi* and American. There has been almost no change in the area under *Desi* varieties since 1950-51 but American cotton started gaining importance in 1955-56 when the area under it was the highest, *i.e.* 20 thousand hectares. In 1969 the area under *Desi* variety was 7 thousand hectares while it was 8 thousand hectares under American variety. The increase or decrease in acreage is due to the availability of water-supply at the time of sowing. The main variety of American cotton sown in the district is H. 14.

Potato.—It is another important cash crop and is sown under irrigated conditions alone both in winter and spring but the autumn crop

covers more area. The area under this crop which was only 690 hectares in 1950-51 rose to 2,120 hectares in 1965-66 and 2,580 hectares in 1969-70. The main varieties are: Patna Red, Upto date, 555 and Kufri Sandori.

Chillies.—Chillies are sown in *Khadar* areas of Panipat, Karnal and Thanesar tahsils. Owing to heavy rains during the last few years, the crop received a setback and there has been a considerable decrease in its area and production. The area under this crop during 1969-70 was 2,370 hectares.

Among the minor crops, mention may be made of onion, tobacco and vegetables. The former two crops are generally grown in loam and sandy loam soils and the area under these crops was 1,766 and 120 hectares respectively during 1966-67, and 1,965 and 95 hectares respectively during 1967-68. Brinjals and cauliflowers are amongst important vegetables which occupied 1,200 and 546 hectares respectively in 1966-67, and 1,350 and 595 hectares respectively in 1967-68.

Oilseeds.—*Toria* and *sarson* are the main oilseed crops and linseed, groundnut and *til* the minor ones. The area under these crops during 1965-66, 1966-67 and 1967-68 was as follows :—

Crop	Area (Hectares)			
	1965-66	1967-68	1968-69	1969-70
Rape and Mustard	15,000	21,000	16,000	17,000
Linseed	190	320	270	180
<i>Til</i>	250	440	300	380
Groundnut	140	450	180	160

Toria is a *zaid kharif* and is grown as an irrigated crop in pure form, while *sarson* and *rai* are mostly grown in mixture with wheat, barley and gram in 8 to 10 feet (2.5 to 3 metres) wide rows. *Toria* being a short duration crop, it has good future in the cropping pattern of this district.

PULSES

Moong, *mash* (*urd*) and *masur* (*massar*) are the three main pulses grown throughout the Karnal district. The former two are *kharif* crops and require loam to light loam soil. Although both of these depend upon rain, heavy rain at the time of flowering proves harmful. Generally no irrigation is required but in case of failure of rain for a longer period during the growing season,

the crop needs irrigation towards the end of September when it is nearing maturity. On the other hand *masur* is a *rabi* crop and all types of soils except alkaline and water-logged areas, suit this crop. It is grown in rainfed areas. If, however, the rains fail, two applications of irrigation become necessary—one at flowering stage and the other at milking stage.¹ The varieties of seed used are shown below :

<i>Moong</i>	..No. 305, 54, Shining <i>Moong</i> No. 1
<i>Mash</i>	.. <i>Mash</i> 48, <i>Mash</i> 1—1
<i>Masur</i>	..No. 9—12

The area under each of the three pulse crops has been as under since 1965-66 ;

Year	Area (Thousand hectares)		
	<i>Moong</i>	<i>Mash</i>	<i>Masur</i>
1965-66	0.04	1.52	15.00
1966-67	0.04	1.42	18.41
1967-68	0.17	1.84	17.76
1968-69	0.03	1.43	15.87
1969-70	—	1.40	13.40

FODDER CROPS

About 12 per cent of the total cropped area of the district is under fodder crops. Apart from these crops, the stalks of *bajra*, *jowar* and maize and the chaff of wheat, gram and minor cereals are used as animal feed. The forage crops are generally sown in the un-irrigated area and are mostly concentrated in the *kharif* season served by the monsoon rains. The important among fodder crops are *chari*, green maize, *gwara*, *methi*, *jayee*, *berseem* and lucerne. Of these *chari* is the leading crop and covers about 52 per cent of the forage crop area. The following table gives the area under different fodder crops

1. Milking stage is the period when formation of grain begins in the crop.

during 1961-62 and 1969-70 :—

Fodder Crops	1961-62	1969-70
	(Acres)	(Acres)
(a) <i>Kharif Crops</i>		
<i>Jowar</i> (<i>Chari</i>)	81,102	80,473
<i>Gwara</i>	13,329	13,874
Other fodders	16,747	16,672
Total (a)	1,11,178	1,11,019
(b) <i>Rabi Crops</i>		
<i>Berseem</i>	31,422	76,412
Lucerne	969	646
Oats	4,611	2,598
Other fodders	34,788	21,020
Total (b)	71,810	1,00,676
Grand Total (a) & (b) :	1,82,988	2,11,695

An area of about 40,000 hectares was under permanent pastures and grazing land during 1960-61. The corresponding figure for 1967-68, 19,871 hectares, is much lower owing to the fact that some pasture lands have been brought under cultivation.

FRUIT CROPS AND GARDENS

A variety of fruits like *malta*, orange, lime, grape-fruit, grapes, guava and mango are grown on a commercial scale in this district. In view of the favourable agro-climatic conditions, irrigation and other facilities available in the district, there is a wide scope for the expansion of area under fruits. Pedigreed fruit-plants are supplied from the registered nurseries. Private nurseries are also located roundabout Karnal and Panipat. In 1963, the area under fruit crops was 3,538 acres. It rose to 3,890 acres in 1967. In order to bring more area under fruit cultivation, long-term loans are advanced to the growers under the 'Development of Horticulture Scheme'. The rise in water-table has, however, hindered further expansion of gardens under citrus fruits.

Two co-operative garden colonies, comprising 2,403 acres were established at Jundla (tahsil Karnal) and Kachrauli (tahsil Panipat) after the Partition. Water-logging and the appearance of *kallar* due to a rise in sub-soil water have, however, retarded the progress of these colonies.

AGRICULTURAL IMPLEMENTS

Any improvement in agriculture is inconceivable without a corresponding improvement in the implements used. Modern implements are being gradually adopted by the farmers in accordance with their utility and scope for use. These are popularised by the Government through different schemes. The description of agricultural implements in common use is given below:

Plough.—It may be of wood or iron, but one in common use is generally of *kikar* wood, made by the village carpenter. It merely scratches the soil up to 4 or 5 inches. The chief defect in it lies in the fact that it leaves ridges of unploughed land between the V-shaped furrows which it makes. The plough also fails to eradicate weeds properly. However, a sturdy and intelligent farmer makes full and efficient use of the plough with a strong pair of oxen. Still, in the small land-holdings and fragmented and non-contiguous plots, the plough is very much suited and it does not disturb the level of the land. It consists of three major parts : the beam (*halas*), wooden body (*hal*) and the coulter (*panhiari* and *kuis*). In 1961, there were 1,01,688 wooden ploughs in the district. The number decreased to 47,500 in 1967 owing to an increasing use of iron ploughs by the farmers. Their number increased from 1,336 in 1951 to 45,686 in 1961, and 68,450 in 1967. The iron plough is more popular among the farmers who came from Pakistan and its adoption is changing the outlook of the local farmers.

Tractor.—The use of the tractor is limited to a few big farms. Still the number of tractors in use increased from 98 in 1951 to 632 in 1961, 1,442 in 1967, and 4,259 in 1969.

Bullock-cart.—This is the usual load carrying device of the farmer. It is commonly used for carrying the farm produce to the thrashing ground, grains to the homestead and surplus, if any, to the market and for other transportation needs. The carts are locally manufactured but some of them are imported from Muzaffarnagar district of Uttar Pradesh, which has specialised in the manufacture of carts. There is no difference between the type and their prices of the carts used in one corner of the district or another, but slight variations do occur owing to varying nature of the soil and certain other factors. Wheels made exclusively of iron are fast replacing the wooden ones. There were 45,685 carts in the district in 1961, 56,760 in 1967 and 78,177 in 1969.

Cane-crusher.—It is another important agricultural implement used, mostly on a co-operative basis, for crushing the cane. Wooden crushers, in vogue some three decades back, have been discarded and those of steel have taken their place. Much of the sugarcane produced in factory areas is supplied to sugar mills at Panipat, and Yamunanagar (Ambala district) and the rest is crushed locally for making *gur* or *khandsari*. There were 4,211 steel cane-crushers in 1961, 7,540 in 1967 and 4,420 in 1969.

Other implements.—A number of other tools and implements are used such as spade, *kasola*, *pora*, *kuhari* (axe), *dranti* (sickle), seed-drills and cotton-drills. Although the scope of mechanised farming is limited because of the small land holdings, the modern implements are being gradually adopted by the farmers. Scarcity of labour and improved economic conditions of cultivators have accelerated this process. The following comparative study for the years 1961 and 1967 is revealing :—

Particulars	Number	
	1961	1967
1. Plough		
(i) Wooden	1,01,688	47,500
(ii) Iron	45,686	68,450
2. Tractors	632	1,442
3. Carts	45,685	56,760
4. Sugarcane-crushers	4,211	7,540
5. <i>Ghanis</i> (Oil expellers)	165	270

SEEDS

Better varieties of seeds enhance considerably the output of agricultural produce. The Agriculture Department does much publicity in favour of improved seeds and concentrates on multiplying and distributing improved seeds to the farmers. The better yielding varieties of some seeds are as under:

Wheat : Local improved : C 281, C 273 and C 306

Exotic better yielding : PV 18, Kalyan, Sona and Sonalika¹

1. This is a new better yielding semi-dwarf variety. In yield it has excelled C 306. It bears uniform bold ambre grains as compared with un-uniform and relatively small grains of Kalyan, Sona and red grains of PV-18. It is recommended for cultivation under high fertility, normal fertility and for late sowing conditions in Haryana, Punjab and Himachal Pradesh.

Rice : Local improved : *Jhona 349, Jhona 351, Basmati 217 and Basmati 370*

Exotic better yielding : T.N.I. , IR 8 and IR8-68

Gram : Pb. 7 and S 26

Maize : Hybrid Ganga 5 Composite Vijay and Sona

Barley : C 138 and C 164

Sugarcane : Co. 453, Co. 312, Co. L 29 and Co. L 9, Co. 975, Co. J 46 and Co. 1148

Bajra : Local improved : T 55, A 1/3 and S 530

Exotic better yielding : Hybrid *Bajra* No. 1 and Hybrid *Bajra* No. 4

Jowar : J.S. 263, J.S. 20 and J.S. 21

To ensure a regular supply of improved seeds, there is a Government Agricultural Demonstration Farm at Karnal, besides 12 seed farms in different blocks where improved seeds are grown for distribution among the cultivators. Relevant details of these farms are given in Table XIII of Appendix.

The varieties of improved seeds distributed by the Agriculture Department and the area under improved varieties in the district during 1961-62 to 1967-68 were as under :

Year	Improved seeds distributed (Metric tonnes)					Area under improved varieties (Thousand hectares)
	Paddy	Wheat	Cotton	<i>Bajra</i>	Maize	
1961-62	32.6	304.3	77.2	2.0	2.3	15.2
1962-63	47.4	282.3	234.6	—	—	16.3
1963-64	150.4	211.0	178.6	1.3	—	27.2
1964-65	233.1	275.2	308.8	0.2	—	18.4
1965-66	243.0	481.1	296.3	1.6	—	36.7
1966-67	168.2	970.4	255.6	4.0	12.0	68.2
1967-68	161.5	1,653.8	262.8	7.7	16.8	81.1
1968-69	42.0	622.2	165.0	5.0	33.6	214.2
1969-70	10.5	390.0	150.0	6.5	33.9	200.0

Since the farmers, in the beginning were not aware of the benefits to accrue from the use of improved varieties of seeds, the demand and consequent distribution was less. As the farmers got enlightened about more yields, larger quantities of seeds were distributed year after year. The decline in the figures for 1968-69 and 1969-70 is again significant. By now the farmers had enough of the improved seeds produced on their own fields. The distribution of improved seeds of maize was started during 1966-67, because it was in that year that the first local hybrid maize was introduced.

The district is notified under the East Punjab Improved Seeds and Seedlings Act, 1949. It is an offence to grow varieties of crops, particularly wheat and cotton, other than those on the approved list of the Agriculture Department. The defaulters are liable to a fine which may extend up to one hundred rupees.

MANURES AND CHEMICAL FERTILIZERS

Next to water and improved seeds manures and chemical fertilizers are the most important inputs for increasing crop yields. In recent years, the use of manures and fertilizers has increased considerably. At present, not only are compost and dung used but farmers have been adding chemical fertilizers to increase crop production. Night-soil and other urban wastes were neglected about 20 years ago, as the people did not like to use them due to social prejudices. Now they are being used in considerable quantities. Green-manuring with leguminous crops add to fertility of the soil. Among all kinds of manuring practices, green-manuring has been found to be the cheapest. Chemical fertilizers give better results when aided with green-manuring.

Chemical fertilizers.—The soils of the district are alkaline in nature and are poor in organic matter and nitrogen. Chemical fertilizers are indispensable for increasing crop yields quickly and these are used alone as well as in combination with organic manures.

As a result of a large number of village demonstrations the cultivators are taking to fertilizers for increased production. *Taccavi* loans are given for the purchase of fertilizers and their supply is arranged by the Government at controlled rates. The district wholesale co-operative society distributes the fertilizers to marketing societies and the sale depots. In 1961-62, there were 160 depots functioning in the district. The number rose to 443 in 1969-70. The following data regarding the distribution of chemical fertilizers shows that the use of chemical fertilizers is getting increasingly

popular among the cultivators :—

Year	Chemical fertilizers distributed (Metric tonnes)		
	Nitrogenous	Phosphatic	Potash
1961-62	4,600	390	—
1962-63	5,600	424	—
1963-64	9,382	870	—
1964-65	16,681	1,610	—
1965-66	15,300	1,351	10
1966-67	17,075	963	161
1967-68	53,022	4,929	432
1968-69	83,305	18,537	978
1969-70	1,07,000	34,000	9,000

Urban compost.—Urban wastes are a potential source of plant-food ingredients. To conserve these wastes for manurial purpose, efforts have continued over the past few years. The Municipal Committees, Karnal, Panipat, Thanesar, Kaithal, Shahabad (Shahbad), Ladwa, Radaur, Gharaunda and Pundri are carrying on the work of composting. The compost produced at these places is sold to the cultivators. The Government advances subsidies to the municipal committees for the initiation and intensification of compost work. The production of urban compost steadily increased during 1961-62 to 1967-68 but declined thereafter as is evident from the following figures :—

Year	Production
	(Metric tonnes)
1961-62	9,971
1962-63	10,539
1963-64	15,840
1964-65	21,745
1965-66	42,836
1966-67	55,320
1967-68	90,625
1968-69	16,164
1969-70	13,758

Rural compost.—The work for the development of local manurial resources (rural compost and dung manure) is being done in the district. It has the following three main objectives :—

- (1) Larger and better utilisation of local manurial resources.
- (2) Preparation of night-soil compost in bigger *panchayats*.
- (3) Intensification of green-manuring.

Extension workers who advise the cultivators in the manufacture of compost are trained in the technique of scientific composting. The total quantity of rural compost prepared during the period 1959-60 to 1969-70, as given below, indicates greater awareness in this regard in the rural areas :

Year	Compost prepared (Metric tonnes)
1959-60	3,10,264
1960-61	5,38,187
1961-62	7,61,623
1962-63	6,31,426
1963-64	8,53,642
1964-65	10,48,345
1965-66	13,24,843
1966-67	15,53,309
1967-68	16,52,000
1968-69	14,00,000
1969-70	11,50,000

The main activity consists of the digging of new compost pits and repairing the old ones for the proper conservation of farm and household wastes. No alternative has been offered to the villagers to discourage them from using dung as fuel. At the same time it is being realized that dung does not contain sufficient percentage of nitrogen, phosphorus, potash, etc. The chemical fertilizers, green-manure and urban and rural compost are better substitutes.

Green-manuring.—This is very important for soil fertility as it directly adds nitrogen to the soil. It also improves the soil texture by the addition of humus or organic matter. The addition of organic matter improves both heavy and sandy soils for it has a binding effect on the loose particles of sandy soil and makes the tough and heavy soil friable. The water-holding capacity of the soil is also increased. Further, it creates better conditions for the increase of useful bacteria in the soil. Green-manuring with sunn-hemp, *gwara* and *dhaincha* is recommended. Experiments have revealed that an increase of about one quintal of foodgrains per acre results through green-manuring. The practice of green-manuring is being popularised by the distribution of free seed packets of *dhaincha*.

The total area under green-manuring crops during the years 1957-58 to 1969-70 shows an appreciable increase :

Year	Area under green manures (Acres)
1957-58	8,485
1958-59	11,784
1959-60	29,052
1960-61	42,599
1961-62	56,699
1962-63	78,899
1963-64	97,000
1964-65	1,04,999
1965-66	93,715
1966-67	73,650
1967-68	60,000
1968-69	85,000
1969-70	83,000

CROP ROTATION

Two crops in a year is the common practice in areas of assured water-supply. In swampy lands where nothing but rice can be grown, the fields

used to be left fallow during *rabi*. With the adoption of the new strategy of 'intensive cultivation', the majority of such areas are now put under *rabi* crops also. Single cropping is in vogue particularly in *barani* areas where either the *kharif* crop is taken or the *rabi*. However, in times of adequate rains in September-October, gram, wheat and gram mixture, *sarson* or *toria* are also sown. Mixed crops are commonly grown in *barani* tracts. Gram and wheat or gram and barley with rows of *sarson* or *toria* are sown mixed to provide safeguards against uncertainty of weather. If the rains are favourable, wheat comes off better, but should the rains be scanty then at least gram may be expected to bear a yield. Rows of *sarson* are drawn in wheat fields; *sarson* thus sown is removed early for fodder and wheat is allowed to grow. It is a common practice to grow pulses which are short growing crops along with *kharif* cereals, e.g. maize and *mash*, *jowar-bajra* and *moong*.

The rotation varies from soil to soil and it differs under irrigated and *barani* conditions. The general rotation of crops¹ followed by the farmers is given below :

1. Wheat—fallow—*toria*—cotton
2. Rice—*berseem*—rice—wheat
3. Rice—wheat (gram)—rice—wheat
4. Maize—*berseem*—maize—wheat
5. Wheat—*chari*—gram—maize
6. Wheat—cotton—fallow—*toria*—sugarcane
7. Cotton—*berseem*—maize—wheat
8. Wheat—*toria*—sugarcane
9. Maize—wheat—maize—wheat
10. Wheat—*bajra* or *chari*—fallow—wheat
11. Wheat—*bajra* or *chari*—gram
12. Maize—potato—onion
13. Maize—potato—potato

AGRICULTURAL PESTS AND DISEASES

The crops are occasionally exposed to damages from an immense variety of diseases and pests :

- (1) **Crop pests and diseases**
 - (a) Sugarcane top-borer
 - (b) Sugarcane stem-borer

1. The time of sowing and harvesting of *kharif* and *rabi* crops is given in Table IX of Appendix.

- (c) Sugarcane pyrilla
- (d) Gurdaspur borer
- (e) Cotton jassid, white fly
- (f) Rice bug
- (g) *Sarson* aphid
- (h) Gram cut-worm
- (i) Toka (*Chrotogogonus* sp.)
- (j) Loose smut of wheat
- (k) Covered smut of barley
- (l) Rusts of wheat
- (m) Maize top-borer

(2) Fruit pests and diseases

- (a) Citrus paylla
- (b) Lemon cater-pillar
- (c) Mango hopper
- (d) Mango mealy bug
- (e) Citrus canker

(3) Vegetable pests

- (a) Red pumpkin beetle
- (b) Brinjal *hadda*
- (c) Potato and *Bhindi* jassid
- (d) *Singhara* beetle

(4) Stored grains pests

- (a) *Khapra*
- (b) *Susri*
- (c) *Dhora*

(5) Miscellaneous pests

- (a) Field rats
- (b) Jackals

(6) Obnoxious weeds

Pohli, Piazi, Bathua, Kurund, Khli, Mena, etc.

These pests and diseases attack the standing crops and stored grains with varying intensity. The Agriculture Department is advocating through intensive propaganda, the different control measures to reduce the damage caused by these weeds. Legal action under the East Punjab Agricultural

Pests, Diseases and Noxious Weeds Act, 1949, can be taken against the cultivators who do not eradicate weeds, pests and diseases before the maturing of seeds.

AGRICULTURAL CO-OPERATIVES

Increased agricultural production depends upon a variety of factors. Amongst them the important ones are : provision of timely and adequate credit, supply of chemical fertilizers, improved seeds, insecticides, pesticides and facilities for marketing of agricultural produce as well as storage arrangements. The agricultural service co-operatives can meet all these requirements. It is through co-operative farming that the scanty resources of the agriculturists can be pooled thus bringing to them the gains of large scale intensive farming. Through co-operative marketing, the drifting away of profits to the middlemen can be checked and in turn high dividends can be secured to the farmers for their produce.

The total number of co-operative societies of all types excluding industrial co-operatives, at the end of the 30th June, 1968, was 1,910 with a membership of 1.62 lakhs. Their owned funds and working capital amounted to Rs. 4.31 crores and Rs. 12.82 crores respectively. Although their number decreased to 1,901 at the end of the 30th June, 1969, their membership increased to 1.74 lakhs and owned funds and working capital to Rs. 4.56 crores and Rs. 19.17 crores respectively. All the inhabited villages numbering 1,350 stand covered by one type or the other type of a co-operative society.

For meeting credit, chemical fertilizers and consumer goods requirements, there were, at the end of the 30th June, 1968, 1,204 agricultural credit service societies with a total membership of 0.98 lakh. Their number at the end of the 30th June, 1969, stood at 1,202 with a total membership of 1.04 lakhs. These societies advanced short term and medium term loans to the extent of Rs. 1.80 crores during 1967-68 and Rs. 3.48 crores during 1968-69. Besides, in 1967-68 the societies distributed 663.17 metric tonnes of chemical fertilizers through a net-work of 578 regular sub-depots in the district. The consumer goods worth Rs. 49 lakhs were also supplied by the agricultural co-operative societies. Similar figures for 1968-69 were : chemical fertilizers—539.28 metric tonnes, sub-depots—665 and consumer goods—Rs. 92.92 lakhs.

The Karnal Central Co-operative Bank Ltd., Karnal advances short term and medium term credit to the various types of co-operatives. As compared to Rs. 1.54 crores advanced during 1966-67, a sum of Rs. 2.07 crores

was advanced during 1967-68 and Rs. 4.21 crores during 1968-69 by this bank. Its membership on the 30th June, 1968, was 2,030 with owned funds amounting to Rs. 59.20 lakhs and working capital amounting to Rs. 322.76 lakhs. The total amount of deposits held by the Bank amounted to Rs. 1.55 crores. Similar figures at the end of the 30th June, 1969, were : membership—2,082, owned funds—Rs. 89.13 lakhs, working capital—Rs. 478.62 lakhs and deposits—Rs. 1.70 crores.

The long term credit requirements of the cultivators in respect of sinking of tubewells, purchase of tractors, purchase of land, etc., are met with by the 6 primary land mortgage banks (one each at Karnal and Kaithal, and two each at Thanesar and Panipat), which have a membership of 10,443. During 1968-69, these banks advanced Rs. 265.08 lakhs as long term credit.

Joint farming/collective farming societies have been organised in order to secure gains of large-scale farming without losing individual proprietorship in land. Government provides financial assistance to such societies and gives various concessions. The co-operative farming societies have, however, not met with a real success. Most of the societies organised in the district are of landless labourers and the waste land could be made available to a few of these. To accelerate the pace of co-operative farming, a pilot project was launched at Nilu Kheri (Nilo Kheri) during 1962-63. Another such pilot project was started at Thanesar during 1964-65. The total number of farming societies in the district at the end of the 30th June, 1969, was 169 with a membership of 3,710. Of these, 128 were joint farming and 41 collective farming societies.¹

The only sugar mill in the district namely, the Panipat Co-operative Sugar Mills Ltd., Panipat, has a membership of 17,812 and a working capital of Rs. 337.44 lakhs. It crushed 1.70 lakh metric tonnes of sugarcane and produced sugar worth Rs. 1.81 crores during the crushing season of 1968-69.²

The other agricultural co-operatives in the field are co-operative marketing societies, garden colonies societies, irrigation societies, poultry societies, dairy and milk supply societies, cattle breeding societies, fishermen's societies,

1. Similar figures at the end of the 30th June, 1968, stood at 183; 4,201; 138 and 45 respectively.

2. Similar figures for 1967-68 were 1.23 lakh quintals and Rs. 2.13 crores respectively.

primary co-operative consumer stores, piggery societies, better farming societies, veterinary societies, etc. The co-operative marketing societies have been mentioned in the Chapter on 'Banking, Trade and Commerce'. Other more important societies in the agriculture or allied fields in 1966-67 to 1968-69 were :

Society	Number		
	1966-67	1967-68	1968-69
Garden Colonies Societies	2	2	2
Irrigation Societies	13	13	12
Poultry Societies	25	22	14
Cattle Breeding Societies	3	2	2
Dairy and Milk Supply Societies	30	32	50
Fishermen's Societies	1	1	1

STATE ASSISTANCE TO AGRICULTURE

It comprises subsidies, *taccavi* loans and other loans advanced to the agriculturists. The loans thus advanced during the period 1961-62, 1965-66 and 1967-68 to 1969-70 are detailed in Table XIV of Appendix.

ANIMAL HUSBANDRY

Animal husbandry in the district is looked after by the District Animal Husbandry Officer at Karnal. He is assisted by the Veterinary Assistant Surgeons, Animal Husbandry Assistants, Stock Assistants, Veterinary Compounders, etc. His main activities relate to cattle breeding, artificial insemination work, control of the outbreak of contagious diseases amongst livestock, improvement of livestock and provision of veterinary aid.

The district possesses a fairly large number of livestock including cattle, buffaloes, horses and ponies, sheep, goats, mules, camels, donkeys and pigs and ranks second (next to Hissar) among all the districts of the State. The livestock population of the district as per 1951, 1961 and 1966 Censuses was 9,40,059, 11,08,209 and 12,03,662 respectively. It recorded an increase of about 22 per cent during the period 1951-66. The following table gives

tahsil-wise relative figures of livestock for the years 1961 and 1966 :—

(hundreds)

Particulars	Karnal		Panipat		Kaithal ¹		Thanesar		Total	
	1961	1966	1961	1966	1961	1966	1961	1966	1961	1966
Cattle	1,516	1,613	765	732	1,925	1,980	1,164	1,164	5,373	5,489
Buffaloes	1,077	1,407	705	773	1,687	1,970	693	798	4,162	4,948
Sheep	131	222	121	97	227	248	77	126	556	693
Horses and Ponies	28	33	19	14	32	26	15	12	94	85
Goats	79	70	58	31	196	136	51	52	384	289
Donkeys and Mules	46	41	34	32	92	69	11	11	183	153
Camels	14	51	17	30	9	19	8	16	48	116
Pigs	84	69	59	51	111	109	28	34	282	263
Total :	2,975	3,506	1,778	1,760	4,279	4,557	2,047	2,213	11,082	12,036

The population of the district being mainly vegetarian, killing of animals is not common. However, there are seven recognised slaughter houses for pigs, sheep and goats at Karnal, Panipat, Kaithal, Shahabad Shahbad), Nilu Kheri (Nilo Kheri), Ladwa, and Pehowa.

Cattle and buffaloes.—Animals, especially cattle and buffaloes, play an important role in the economy of the district, and animal husbandry forms an integral part of agriculture. The essential equipment of the peasant-farmer includes a pair of oxen or buffaloes to do the ploughing and to draw the cart. Even though bullocks have been replaced by motor and electric power in some places, yet the importance of cattle in agricultural economy has remained almost unchanged on account of the yield of milk, manure, skins and hides in addition to meat and wool.

Every farmer has at least either a cow or a buffalo. The cows are kept mainly for breeding calves, and partly on religious grounds also. The Royal Agricultural Commission of India remarked that "in most parts of the world, they (cows) are valued for food and for milk; in India, their primary

1. Figures for the Gula (Guhla) tahsil are included in the Kaithal tahsil since prior to August 13, 1968, Gula (Guhla) was a sub-tahsil of Kaithal.

purpose is to produce bullocks for draught for the plough or the cart. The religious veneration accorded to the cow by the Hindus is widely known. To at least half of the population of India the slaughter of the cow is prohibited, and this outstanding fact governs the whole problem of improvement of cattle in this country. It is necessary to recognise the obligations under which the country stands to the cow and to her offspring, the trusty ox. Without the ox, no cultivation would be possible; without the ox, no produce could be transported."¹ This is largely true even to-day.

In certain tracts of the district, especially in the Rajput villages, the ordinary agricultural crops held an entirely subsidiary position, the chief agricultural care of the people being to secure a plentiful supply of fodder from their fields for their animals. In those tracts whatever scanty grass sprang up, was eaten up before it disappeared under the burning heat of the sun. Thereafter the cattle were taken away in large herds to the *duns* of the Siwaliks or to the riverain tracts and villages irrigated by canals in the beginning of April when the supply of fodder began to run short and the pools dried up. Large pastures and grazing areas were left by the villagers for the cattle. With the development of irrigation facilities and under the Grow-More-Food Campaign, areas under pastures and fodder grasses have been reclaimed and brought under cultivation. Cattle-breeding has, therefore, shifted to the non-irrigated area all over the district where rainfall holds the key to the situation.

The cattle and buffalo population which numbered 10,43,700 in 1966, accounted for 86.6 per cent of the total livestock. Out of 5,48,914 cattle and 4,94,810 buffaloes, the breedable (*i.e.* female) population of cows and buffaloes was 1,44,400 and 2,63,900 respectively. Their relative figures *vis-a-vis* those of their male counterparts have been shown below :

	Females above three years					Males above three years		
	Total	In milk	Dry	Not calved	Others	Total	Breeding bulls	Other bulls and buffaloes
Cows	1,44,400	78,500	59,000	5,600	1,300	2,37,700	1,200	2,36,500
Buffaloes	2,63,900	1,30,000	1,16,800	16,100	1,000	21,400	700	20,700
Total :	4,08,300	2,08,500	1,75,800	21,700	2,300	2,59,100	1,900	2,57,200

1. *Report of the Royal Commission on Agriculture in India*, 1928, p. 169.

The Department of Animal Husbandry has taken up the improvement of cattle-breeding through the Key Village Scheme which envisages a systematically planned method for the best utilisation of superior germ-plasm obtained from superior stock.¹ The technique of artificial insemination is adopted to utilise the available, though limited, number of approved bulls to the maximum extent. Controlled breeding is brought about through elimination of scrub bulls. Simultaneously attention is paid to the increased production of feeds and fodders for feeding cattle on a proper, nutritious and balanced feed. The bulls of different breeds are provided to the villagers for better breeding. There are 1,158 approved cow bulls and 592 approved buffalo bulls in the district. The artificial insemination centres with their key village centres are making up the shortage of pedigree bulls for the improvement of cattle-breeding. The National Dairy Research Institute, Karnal maintains some of the best breeds of milch animals, namely Tharparkar,² Red Sindhi and Sahiwal Cows and Murrah Buffaloes. The Swiss breed is of recent introduction. The institute distributes pedigreed bulls to different States for their livestock development programmes and to key villages attached to it. The semen from good sires is supplied for artificial insemination of cattle in the villages within a radius of about 10 miles.

Cattle rallies and cattle shows are held in the district and prizes are awarded to the owners of good cattle. Such shows provide an impetus to the cattle owners and to the breeding operations. Subsidies for the maintenance of different kinds of good-quality animals are given under different development schemes.

Stray animals which have been on the increase during the last few years are impounded and owners are fined. A systematic cattle-catching scheme was launched during 1961. It produced good results. The animals caught under the scheme were sent to southern India or were handed over to *gosadan* at Mandewala (Ambala district). There is no *gosadan* in the district

1. To locate the superior germ-plasm in the breeding tract as also to study the production records and select top quality animals by introducing intensive milk recording in the tract, a scheme for the Registration of Top Quality Animals sponsored by the Government of India has also been introduced in the district. Selected animals are registered under this scheme for making optimum and the best possible use of these quality animals.

2. Tharparkar Bull of the National Dairy Research Institute, Karnal, was declared the best animal (opposite sex) at the All-India Cattle Show held at Bangalore in 1959. Again, Tharparkar Cow of the institute was declared the best animal (opposite sex) and the highest milk yielding animal (38 pounds per day) of the show at Western Regional-cum-All-India Cattle Show held at Nagpur in 1964.

but three subsidised registered *gaushalas* at Panipat, Samalkha and Kaithal are doing useful work. There are also three unregistered *gaushalas* at Kurukshetra, Naultha and Shahabad (Shahbad).

Gaushalas, according to the old concept, were the institutions opened under a religious sentiment to house the unproductive and useless cattle and were run on charity. To give new meaning to the old concept, an idea was mooted to convert these institutions into Cattle Breeding-cum-Milk Producing Centres with some financial assistance and technical guidance. Accordingly, the three registered *gaushalas* at Panipat, Samalkha and Kaithal have been developed under the Scheme for the Development of *Gaushalas*. The income from the sale of milk and animals from the *gaushalas*, helps a lot in running these institutions. These institutions now also serve as Breeding Units.

Intensive Cattle Development Block, Karnal (Central Project).—To improve the livestock wealth in the country, the Government of India has laid down a policy to establish Intensive Cattle Development Blocks. In pursuance of that policy, one such block under the charge of a Project Officer, has been established at Karnal in 1967. Presently, this project envisages augmentation of the milk procurement for the Delhi Milk Supply Scheme to meet the demand of milk for the rapidly increasing population of Delhi.¹

This project would go a long way in increasing the production of milk and also help improve the socio-economic conditions of the people engaged in cattle breeding in the Milk Shed Areas² in the district, viz. the Panipat tahsil and part of the Karnal tahsil. It aims at an all-round improvement of animal husbandry practices. This project is to cover about one lakh breedable population of cows and buffaloes of this area for intensive breeding operations. The facilities for breeding are to be provided through natural services as well as by artificial insemination. This is to be done with the help of quality bulls (Jersey, Haryana and Murrah Buffalo Bulls) kept at the Semen Station and the Stockmen Centres, and by the provision of veterinary aid and mass-scale castration of scrub bulls roaming about. A Central Semen Collection Station has been set up at Karnal with well equipped laboratory to serve as a Central Semen Bank. Jersey Bulls are kept here.

1. The expenditure on the project has to be met by the Government of India as 75 per cent grant and 25 per cent loan.

2. Milk Shed Area means an area or locality from where a milk plant gets its milk supply.

Improved Haryana and Murrah Buffalo Bulls are kept at the four Regional Artificial Insemination Centres at Asandh, Samalkha, Panipat and Chharaunda. These centres serve the respective regions for providing artificial insemination as well as natural service through the establishment of Stockmen Sub-Centres. At present 75 such Sub-Centres¹ have been set up with an eye on making available improved breeding facilities at the door of the breeders.

The development of feeds and fodder is also to be undertaken by giving various kinds of incentives for growing more fodder and for adoption of new fodder cultural practices. Demonstration plots set up in cultivators' own fields and construction of silo towers have to be subsidised. The programme also envisages the organisation of Milk Producers' Co-operative Societies which would be given loan for obtaining necessary dairy equipment, cattle feeds and fodders, and milch stock.

Intensive Cattle Development Project, Pehowa (State Project).—Consistent with the latest breeding policy enunciated by the Government of India for introducing exotic strain in the non-descript cattle for increasing milk production, five medium-sized Intensive Cattle Development Projects are to be opened in the State, especially in the Milk Shed areas, during the current Fourth Five-Year Plan. Out of these, one project has been set up at Pehowa (now at Thanesar) during 1969-70. The object of this medium sized project is to cover 50,000 breedable population (buffaloes and cows) of the Pehowa Project area under Intensive Cattle Development Programme. The Central Semen Bank maintains five Murrah Buffalo Bulls for providing prompt and effective breeding service to the live-stock through the agency of 30 Stockmen Centres (detailed in Table XVI of Appendix) attached to the three Regional Artificial Insemination Centres at Pehowa, Kaithal and Gula (Guhla) and the Semen Bank, Thanesar.

Sheep-breeding.—The district with a sheep population of 69,326 has a fairly good scope for the development of sheep and consequently of wool industry. Sheep provide necessities of vital importance, *e.g.* meat for food, wool for clothing, skin for industrial enterprise and manure for agriculture. In order to bring about improvement in sheep stock, a Sheep and Wool Extension Centre has been functioning at Goli² from where pedigreed

1. For details see Table XV of Appendix.

2. A Stock Assistant is in charge of this Centre and works under the supervision and guidance of the Sheep Supervisor, Bhiwani (district Hisar).

rams are supplied to the breeders for upgrading their sheep. Improved rams are kept at this Centre and given to the breeders during the tugging season¹ for ensuring scientific and systematic breeding. The total number of sheep registered for improved breeding in this district is 5,016. This centre does useful work in educating the breeders in the improved methods of rearing, breeding and management of sheep, including the shearing and grading of wool. It also provides veterinary aid to protect sheep from contagious and non-contagious diseases, which cause heavy losses.

Horses and ponies.—With the introduction of speedier modes of travel, there has been an overall decrease in the population of these animals. In 1920, their number stood at 13,029 but in 1966 it fell to 8,500.

Donkeys and mules.—The number of donkeys decreased over the past forty years from 21,000 in 1920 to 15,300 in 1966. Mules, on the other hand, have shown an increase as they are in greater demand to pull carts with pneumatic tyres over short distances.

Poultry farming.—Since the Partition, displaced persons from the West Punjab (Pakistan) have given a stimulus to poultry farming. Previously people were vegetarian and had religious prejudices against the eating of poultry and eggs. With the spread of education and under the influence of modernisation, these prejudices are now being shed gradually.

According to the 1966 Census, there were 1,44,383 poultry birds in the district. On account of its proximity to Delhi and the Grand Trunk Road traversing through it, the district has a great potential for poultry development. The poultry and its eggs find a ready market at Delhi. One Poultry Extension Centre at Shahabad (Shahbad) and one Intensive Poultry Development Block at Karnal with two Poultry Service Stations at Nilu Kheri (Nilo Kheri) and Thanesar are functioning for the improvement of poultry. In addition to the poultry extension work and disease control programme, the centres provide improved breed of poultry birds, eggs and poultry feed. Facility has been provided for the incubation of eggs at a nominal charge of 12 paise per egg.

Piggery.—Although, majority of Haryana's population is vegetarian, yet piggery development work in the Karnal district deserves a special mention. Of all the districts of Haryana, according to the 1966 Census, this district tops in piggery population with 26,259 animals. Earlier, no

1. The period March to June and September to November constitutes the tugging season.

improvement in the breed could be brought about since only Harijans with meagre resources and indigenous stock were engaged in pig breeding. As a part of the development plans, the Animal Husbandry Department introduced 'Large-White Yorkshire Pigs', a foreign breed, at the Government Livestock Farm, Hissar. The progeny thus reared at the Hissar farm was distributed to the breeders at subsidised rates. The pure breeding and cross breeding of indigenous stock with the Yorkshire Pigs has brought about tremendous improvement in the piggery wealth and this district has also benefited. Another Pig Breeding Farm has been established at Ambala which will no doubt further improve and develop piggery in Karnal. To give this programme further push one Intensive Piggery Development Block has been set up in this district where pigs of Large-White Yorkshire breed are issued at concessional rate, *i.e.* Rs. 10 per Boar and Rs. 100 per Sow, for raising the pure Yorkshire breed and improving the local stock by cross breeding with exotic Boars. Yorkshire Boars are also available for service at the various centres of the block. A feed subsidy of Rs. 5 per month is given to encourage the breeders to raise Yorkshire Boars.

Animal diseases.—The common animal diseases prevalent in the district are haemorrhage, septicaemia, rinderpest, foot-and-mouth disease, surra black quarter and parasitic diseases. These diseases are controlled with prophylactic vaccinations and curative measures. Regular campaigns of inoculation and vaccination against these diseases are conducted.

Veterinary hospitals.—It was in the year 1900 that a veterinary hospital at the district headquarters was started and subsequently three more hospitals were established at the tahsil headquarters. There is now a network of 28 Veterinary Hospitals,¹ 6 Government Permanent Outlying Dispensaries, 5 First Aid Centres and 5 Surra Centres, as shown in Table XVII of Appendix to provide veterinary aid to the livestock in the district. A veterinary hospital functions under the charge of a Veterinary Assistant Surgeon who is assisted by a Compounder or Stock Assistant and miscellaneous class IV establishment while a veterinary dispensary functions under a Veterinary Compounder. At the First Aid Centres, only medicines and instruments of First Aid are kept with the village Lambardar or Sarpanch.

To help the field staff to arrive at proper diagnosis for the control of contagious and non-contagious diseases, a Clinical Diagnosis Laboratory

1. 21 Local Bodies and 7 Government Veterinary Hospitals.

(Veterinary) has been set up at Karnal in 1967. Blood, faecal and other material received from the field are examined to find out the causes and etiology of various diseases. This laboratory examined 3,473 samples during 1969-70. The unit will thus prove very useful in the Disease Control Programme. Besides, there are 80 outlying dispensaries which are attached to hospitals and are visited by the veterinary doctors once a week. In this way facilities for the treatment of sick animals have been extended to the remote areas of the district.

Dairy farming.—Milk is derived mostly from cows and buffaloes. According to the 1966 Census, the breedable (*i.e.* female) population of cows and buffaloes was 1,44,400 and 2,63,900 respectively. The total quantity of milk produced daily in the district was estimated at 7,500 quintals in 1966 compared with about 6,400 quintals in 1961.

Milk is mostly produced in small quantities by individual cultivators who keep one or two cows and buffaloes for this purpose. Attempts were made to organise the milk producers in some areas by setting up co-operative societies. In all, 30 co-operative milk producers' societies with 448 members were registered, but more than 50 per cent of these are not functioning properly due to lack of interest on the part of the members. Milk trade remains disorganised, adulteration of both milk and its products is rampant, and their prices run high during the summer months when adulteration, too, is at its highest. Shortage of milk at that time is the basic reason for the latter. The milk trade is in the hands of middlemen who, generally, do not pay a reasonable price to the milk producers.

Of all the districts in Haryana, Karnal has the largest number of milch animals per 100 square kilometres. It has also the largest irrigated area from canals and tubewells in the State. Therefore, the district offers rich potentialities for developing milk production and a milk industry. The following significant developments have taken place in this regard in recent years :—

- (i) The National Institute for research in dairying was shifted from Bangalore to Karnal in 1955. The institute has grown very much since then and has now come to be the premier institute for dairy education and research in Asia. The institute provides instruction in dairying at the Diploma, Degree and Post-Graduate levels. Separate courses have been instituted for Dairy Husbandry and Dairy Technology for the Diploma,

Graduate and M.Sc. courses. Scholars from all over India and outside India attend these courses.¹

- (ii) The Ministry of Food, Agriculture, Community and Development and Co-operation, Government of India, has set up an Intensive Cattle Development Project, covering one lakh cows and buffaloes of breedable age in the district. This project covers the Panipat tahsil and some of the adjoining areas. Its aim is to increase milk production for procurement by the Delhi Milk Scheme.
- (iii) M/s Haryana Milkfoods are setting up a Milk Plant at Pehowa. The plant will be equipped to manufacture sweetened condensed milk, milk powder, butter and ghee, its ultimate installed capacity being about 40,000 kg per day.

FISHERIES

The Fisheries Department in the district is represented by a Fisheries Development Officer who is in charge of all the development activities. He is assisted by 4 Fisheries Officers, 1 Farm Assistant, 1 Pumping Set Driver and other technical staff. A small Fisheries Research Unit headed by a Fisheries Research Officer has also been established at Saidpur (near Karnal).

The natural sources of fisheries in the district include the Yamuna and its tributaries, the Rakshi, Chautang, Saraswati, Markanda, Omla and Ghagghar. Of these, the Yamuna and the Ghagghar are more productive. Fishing rights in these rivers and streams are controlled by the State Government. These are leased out annually through an open auction. In addition, fish culture is practised in 137 ponds covering a water area of 464 acres (187.8 hectares). The area has a rich potential for the development of fisheries but the rural population being vegetarian is apathetic towards its development. Government, however, provides sufficient incentive by way of financial assistance for the improvement of ponds and by supplying fish seeds at concessional rates. A fish Seed Farm in an area of 4 acres (1.6 hectares) has been established at Saidpur. The seed of suitable varieties of fish is stored and distributed from this centre.

The important varieties of food fish available in the district are as

1. For further details, see Chapter on 'Education and Culture'.

under :

1. Carps of family Cyprinidae

Labeo rohita (Rohu).—It is a column-bottom feeder, and grows to three feet or more in length. It is a very popular variety.

Labeo Calbesu (Kalbans).—It is relatively slow growing and attains a size of about three feet.

Catla catla (Thaila).—It is a surface feeder and is a fast growing carp fish in India. It is quite popular when not exceeding two feet in size. The large specimens, reaching up to three feet, are rare.

Cirrhhina mrigala (Mori).—It is a bottom feeder and grows to three feet or more.

2. Cat fishes of sub-order Siluroidae

Wallago attu (Malli).—It is a predacious and piscivorous fish, and grows to a size of about six feet. It is a good game fish.

Bagarius bagarius (Gonch).—It grows up to six feet in size and is probably the largest fish caught on rod and line in India.

Silonia silondia (Silond).—It prefers strong streams and clear deep waters. It grows to a size of six feet, and is considered good for eating.

Mystur seenghala (Seenghala).—It attains a length of over four feet.

Mystus aor (Seenghari)

Mystus cavasius (Tengra)

Rita rita (Khagga)

3. Fishes of family Notopteridae

Notopterus notopterus (Pari)

Notopterus chitala (Moh).—It is a game fish growing to about 14 feet in size.

4. Murrels of family Ophiocephalidae

Ophiocephalus¹ marulius (Saul)

Ophiocephalus¹ striatus (Daula)

Ophiocephalus¹ gachua (Dauli)

Ophiocephalus¹ punctatus (Kartar)

1. The word 'Ophiocephalus' has been replaced by the word 'Chana' by the Zoological Survey of India.

5. Spiny eels of family *Mastacembelidae*¹

Mastacembelus pancalus (Groj)

Mastacembelus armatus (Groj)

Approximately 1,158 quintals of fish is produced in the district annually. After meeting the local requirements it is exported to Delhi and Calcutta. The income to the State from this source is about one lakh rupees per annum. The fisheries industry provides employment opportunity to about 250 persons and subsidiary avocation to about 450 demobilised men in the district.

FORESTRY

The Karnal district is under the charge of the Divisional Forest Officer, Karnal Forest Division, with headquarters at Karnal. This division falls in Haryana Circle with headquarters at Pinjore.²


The six forest ranges covering the district are: (i) Karnal Range, (ii) Saraswati Range, (iii) Panipat Range, (iv) Kaithal Range, (v) Pehowa Range and (vi) Forest Extension and Soil Conservation Range, Karnal. The technical and the executive staff looks after the existing forest areas belonging to the Government as well as private areas which are notified under section 38 of the Indian Forest Act, 1927, and sections 4 and 5 of the Land Preservation Act, 1900. Nurseries of different species are raised for afforestation and re-afforestation. The staff also attends to the soil conservation works and anti-erosion measures.

Forests and forest produce have a recognised place both in the rural and urban economy of the district. Forests supply the much needed wood for fuel and timber for building purposes and the making of agricultural implements. They also support the small-scale industries like furniture making and saw milling located largely at Karnal and Panipat. With an established system of canal irrigation and imperfectly developed surface drainage, there has been a rapid rise in the water-table and an increased menace of water-

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1. This variety is not as commonly found in the Karnal district as in the Rohtak district.
 2. The Forest administration is under the charge of the Chief Conservator of Forests, Haryana. Under him the Conservator of Forests is in charge of the Haryana Circle which covers the whole of the State. The circle is divided into controlling charges called forest divisions, each under the charge of a Divisional Forest Officer. A forest division is divided into sub-divisions and ranges or executive charges which are further sub-divided into blocks comprising beats or protective charges. The charge of a range is ordinarily held by a Forest Ranger. The charge of a block is held by a Deputy Ranger or a Forester and of a beat by a Forest Guard.

logging. The forests play a vital role in improving soil drainage by using plenty of sub-soil water and thus mitigating the evil effects of water-logging.

Area under forests is classified according to ownership, *viz.* private and State. Forests owned by corporate bodies and private individuals are included under private forests. The State forests on the basis of legal status are categorised as reserved, protected and unclassified. Reserved forests are permanently dedicated either to the production of timber or other forest produce and in them the right of grazing and cultivation is seldom allowed. In protected forests, these rights are allowed subject to certain restrictions. The following area was under forests in the district during 1969-70 :—

Classification of forests	Area (Hectares)
	
State Forests	
Reserved	1,802
Protected	4,144
Strips	6,487 (Approximately)
Unclassed	40
Private Forests	
Closed under section 38 of the Indian Forest Act, 1927	40
Closed under the Land Preservation Act, 1900	—

The indiscriminate cutting of trees resulted in the scarcity of fuel and timber requirements of the district. Again, the reckless cutting of trees during the consolidation of holdings further aggravated this problem. The firewood and timber prices shot up. The rural population was consequently forced to burn dung as fuel, which, if returned to the soil, would increase its productivity. It was decided to bring in more Government lands under the control of the Forest Department for raising fuel and economic plantations. Therefore, in 1951, railway strips of Northern Railway and strips along the national highways were put under the charge of the Forest Department. Likewise, all the P.W.D. road strips and canal strips were transferred to the Forest Department in 1956. The lengths of such rail/road

and canal strips in the Karnal district under the control of the Forest Department are, as under :

- | | |
|---|---------------------|
| (i) Rail strips | .. 219 kilometres |
| (ii) Road strips | .. 825 kilometres |
| (iii) Canal strips (including bunds, drains and minors) | .. 2,282 kilometres |

This will go on increasing gradually with the construction of more roads, canals, drains, etc. To augment the fuel wood and timber supply in the district, an area of 9,662.17 acres (about 3,910 hectares) of waste lands was acquired by the Government in 1956-57 in Gula (Guhla) sub-tahsil.¹ The greater part of this land has been taken for plantations of *shisham* and exotic plants called Eucalyptus hybrid. This is a unique feature of forestry practised in this district and no parallel exists anywhere in the country. These irrigated plantations are known as Saraswati Plantations. Some set-back to these plantations was caused by fires, floods, and grazing. The successful introduction of Eucalyptus hybrid in 1962 is an outstanding feature of the tree planting activities.² It is a fast growing species and within five years attained an average height of 11.10 metres in the plantations along the Grund Trunk Road near Shahabad (Shahbad). This species is being raised as a part of the programme of raising plantation to meet the raw material needs of the paper and other industries. Further, an intensive programme of raising tree plantations along the avenue strips of roads, canals and railways has been in progress. Many Government waste lands called Birs³ amounting to 6,842 acres (3,416 hectares) have also been brought under forest during 1957-58 to 1969-70.

1. Gula (Guhla) was raised to the status of tahsil on August 13, 1968.

2. Such trees have been planted on canal banks, road sides and other compact plantation areas such as Saraswati Plantations (about seven miles from Pehowa), Kohli Khera Forest near Gula (Guhla), Siwan Forest near Kaithal and Khanda Kheri Forest near Asandh.

3. Most of the Government waste lands, called Birs, were transferred to the Forest Department for management in the years starting from 1940. An area of 1,801.43 hectares was declared as Reserved Forests and 4,099.13 hectares as Protected Forests (other than Rail, Road, and Canal Strips) under the Indian Forest Act, 1927.

Reserved Forests : Bir Senothi (173.11), Bir Roherian (45.08), Bir Khanda Kheri (103.43), Bir Bassi (92.67), Bir Kohali Kheri (604.20), Bir Nikate Pura (8.37), Bir Theh Majibula (308.15), Bir Barason (450.82).

Protected Forests : Seonsar (505.20), Navach (464), Papsar (223.59), Bichhian (254), Kakior (471.60), Rewahar (356.57), Helwa (98.80), Kakeri (31.14), Macchheri (482.80), Theh Newal (118.17), Bakhli (93.27), Theh Majibula (98.40), Ramgarh alias Rohar (445.60), Siwan (188.88), Guhla (27.60), Baragaon (83.65), Sheikh Pura (63.71), Upli (44.75), Bhalai (8.18), Bir Sujara (36.60).

The acute shortage of fuel wood and timber has made the farmers conscious of the role of raising trees on farm lands as a part of Farm Forestry Programme. The Eucalyptus tree has attracted their attention because it grows fast and its interference with the crops is minimum. On an average 14,500 plants are supplied to the public every year.

Forest produce.--The produce from the forests consists of timber, firewood, *babul* bark, grasses and gums. The steadily increasing income derived from the sale of major and minor forest produce for the years 1957-58 to 1969-70 is shown below :

Year	Income from forest produce
	Total Revenue
	(Rs.)
1957-58	1,91,500
1958-59	4,20,200
1959-60	2,52,400
1960-61	3,80,300
1961-62	6,15,200
1962-63	3,87,200
1963-64	3,27,200
1964-65	6,10,700
1965-66	4,90,900
1966-67	5,68,800
1967-68	9,35,400
1968-69	4,97,651
1969-70	5,17,073

NATURAL CALAMITIES

FLOODS

The seasonal overflow of the Yamuna, the Ghagghar, and the Markanda, Saraswati, Chautang and Rakshi streams is responsible for floods in the Karnal district. The Ghagghar and Markanda are responsible for floods in the northern and the north-western parts, the Yamuna in the

eastern part, *i.e.* the Khadar area, and the Chautang and Rakshi in the central and the south-western parts of the district. The carrying capacity of the existing main and tributary drains is insufficient. The other contributing factors are : (i) natural calamities such as heavy and incessant rains ; (ii) cuts and breaches in canals and drains made by the villagers in order to protect their own area from flooding which result in flooding of the other areas; and (iii) non-excavation of the field drains (link drains) constructed on voluntary basis.

The Markanda stream is joined by the Tangri, Salani, Satkumba, Runchoe, Bangna Nadi and other small hill torrents above the Ambala-Saharanpur Railway Line from where the discharge of accumulated water starts causing havoc in the lower areas. Floods in the upper catchment are not so severe as in the middle or the lower reaches. Prior to the construction of Bhakra canals, the flood-water used to spill over only in the upper region, *i.e.* the Ambala and Karnal districts, and the Patiala district (Punjab). The inundated area gave bumper crops especially in the *rabi* season. The flood-water was used economically and usefully. Now the floods are abnormal and instead of being useful, cause hinderance in the utilisation of regular supplies from the Bhakra Canal System. During the last three years there have been breaches in the Damli Bund near village Khanpur (district Ambala) causing heavy floods in tahsil Thanesar. The water used to flow in the low lying area starting from village Padlu of tahsil Thanesar and passed through 21 villages¹ in the form of a vast stream. The Markanda sometime overflow near village Jogi Mazra and caused damage to about ten surrounding villages. The Damli Bund has now been extended and breaches repaired with the result that no damage was caused in the Thanesar tahsil during 1969-70 and 1970-71.

In the Kaithal tahsil, the area surrounding Pehowa and Kaul slopes steadily towards south-west with the result that the collected rain-water moves into Kaithal town. During rainy season, a lot of water collects within the area bounded by the Saraswati Distributary and Sirsa Branch and it starts flowing towards Kaithal town. In the days gone by, rain-water was collected in big ponds around Kaithal town and other villages and in the forest lands between Pehowa, Kaithal and further down to Khanauri (tahsil Rajpura, district Patiala, Punjab). The forests having been cleared and brought under

1. Sirsila, Rawal Kheri, Kanepla, Chanarthal, Sanwala, Partab Garh, Ratgal, Padlu, Rawa, Chhapra Zabti, Jandheri, Chhapra, Dig, Teora, Dhantori, Khanpur Kaulian, Masana, Machhroli, Bakana, Salimpur and Jogi Mazra.

plough, the natural drainage line has been disturbed. With the advent of canal irrigation the water level has risen considerably. The land, therefore, being already saturated, there is practically no absorption of water during heavy rains. The monsoon of 1968 submerged the whole of the area around Kaithal town to a depth of 2' to 4' for a number of days causing enormous damage to the standing crops and property.

Kaithal drain has been excavated for draining out this water into the Ghagghar. The drain starts from a big depression near village Keorak and empties into Ghagghar near village Khanauri. The length of the drain is 32.72 miles (about 52.7 kilometres) with a peak discharge of 1,168 cusecs. A protection bund on the left side of the drain has been constructed to safeguard the town of Kaithal from flood-water.¹

In the Gula (Guhla) tahsil, flood-waters of Saraswati Nadi and river Markanda are collected into Bibipur lake (near Bibipur village) for irrigation. Saraswati drain is an escape channel in which surplus water of Bibipur lake is drained. The drain starts from D/S of Regulator on Bibipur lake near village Murtazapur and outfalls into river Para (a tributary of river Ghagghar) near village Pasawal. The present capacity of the drain is 16,000 cusecs and it provides an effective drainage line for the area through which it passes. Banks have been provided on both sides of the drain as a safeguard against overspilling during peak discharge. This drain has eliminated to a great extent the flood problem of its catchment area.

The full benefit of main drains will accrue only by digging link drains to drain out the flood-water from local depressions. Government encourages the construction of such drains on a voluntary basis. A few of the link drains, i.e. Sila Kheri, Manas, etc., have already been constructed by the villagers. Other villages are being persuaded to dig out link drains in their area.

In the Karnal tahsil, damage used to be caused by the overflowing of river Yamuna which submerged most of the Khadar area. The Kunjpura Bund, Jarauli Retired Bund, and Dabkauli Chaura Bund have been constructed to safeguard the villages against flooding. Some spurs are being constructed near village Jarauli along river Yamuna for protecting the face of Kunjpura Bund.

1. Two more tributary drains, viz. Amin and Pundri, which will outfall into the main Kaithal drain are proposed to be dug out. These drains will take care of the flood-water on the left side and right side respectively of the Sirsa Branch. On their completion the area of the Kaithal sub-division will become immune from flood-water and water-logging.

- (i) Spurs near villages Bilaspur and being repaired. The Yamuna has a tendency to course towards the right side and erode lands of Bilaspur and Hathwala (Hatwala) which are to be protected by the construction of two new studs.
- (ii) To save villages Sanauli, Tamsabad and Nawadha which lie on river Yamuna, a flood protection bund along the Yamuna is being constructed.
- (iii) A flood protection bund near villages Nanhera and Rana Majra is being constructed to save the villages from erosion by the Yamuna.
- (iv) The Tributary Drains No. 1 and 2 (tahsil Panipat) of Nai Nallah Drainage system are being remodelled.

The drainage system is being improved and existing drains such as Indri Drain, Nisang Drainage system, Main Drain No. 2 and Jundla Drain are being remodelled and their banks strengthened.

The damage caused by floods and heavy rains in the district since 1955 is shown in Table XVIII of Appendix.

FAMINE

Besides the *chalisa* famine of 1783, the district has been visited by famine many a time, perhaps one of the most terrible being that of 1833. Relief works seem first to have been established in the famine of 1861 when 22,237 persons were provided relief in one month. In 1869 the famine was more severe in Karnal than in any other part of the Punjab, and hundreds of people were reduced to semi-starvation. Cattle numbering 65,000 died. From 1875 to 1877 there was not a single good harvest, and though the scarcity hardly assumed the proportions of a famine, the cattle suffered terribly. There was grass famine in 1883-84. In 1896-97 areas affected were the Nardak tracts of Karnal and Kaithal, and the Naili tract of Kaithal. In 1899-1900 the Nardak in Karnal, and a part of Nardak in Kaithal were protected by Nardak Branch of the Western Jumna (Yamuna) Canal. The tracts affected were chiefly the Naili and Bangar tracts of the Kaithal tahsil and parts of the Thanesar tahsil.



सत्यमेव जयते

AUGMENTATION CANAL PROJECT

Haryana has been chronically short of water resources as there is no river passing exclusively through the State. The two main sources of supply of water for irrigation in the State are the rivers Satluj and Yamuna. The available water in the river Yamuna is shared between Haryana and Uttar Pradesh roughly in the ratio of 2 : 1. The Haryana share which is passed through the Western Jumna (Yamuna) Canal irrigates the eastern and south-western portions of the State. The water in the Western Jumna (Yamuna) Canal gets reduced to as low as 1,800 cusecs during winter against the requirement of over 9,000 cusecs for the *rabi* crops. Augmentation of canal supplies is, therefore, a matter of prime importance for agricultural development. Surface water being inadequate, ground water is the only hope for increasing the canal supply.

The Yamuna ground water basin is rich in sweet water down to great depths. To augment the water-supply in the Western Jumna (Yamuna) Canal, 256 tubewells were installed during 1948—1955. After the formation of Haryana, 128 more tubewells were installed during 1966—1971. Water from these tubewells is pumped into the canal. It was, therefore, decided to explore further the possibilities of tapping to full advantage the underground water of this basin. The ground water contours based on water observations in open wells along grid lines revealed the presence of additional underground water which could be tapped. Under the scheme as originally conceived in 1969, it was proposed to instal 500 deep tubewells for tapping about 1,000 cusecs of ground water in the Yamuna Groundwater Basin extending from Dadupur to Panipat. Later, it was decided to combine the augmentation of canal supplies with saving of absorption losses through a lined channel. The augmentation from the ground water resources was restricted to augmentation from Jagadhri to Munak. In other words, during the *rabi* season, the available water-supply in the Western Jumna (Yamuna) Canal was to be diverted into the Augmentation Canal which was also to receive water from the augmentation tubewells and coupled with the savings from seepage losses, was to provide additional water-supply of about 1,000 cusecs for the distribution system of the Western Jumna (Yamuna) Canal below the outfall of the Augmentation Canal near Munak. The result of this planning has been the Augmentation Canal Project, the construction of which at a cost of Rs. 12.69 crores was achieved within 14 months. Undertaken in November 1971, it was commissioned in January 1973.

The project consists of the following four units :—

Unit-I : Augmentation Canal

Unit-I is a 75.25—kilometre long lined channel, known as the Augmentation Canal, taking off from the Western Jumna (Yamuna) Canal (Main Line Lower) near Yamunanagar. It outfalls into the main Branch of the Western Jumna (Yamuna) Canal upstream of Munak with a capacity ranging from 3,240 cusecs to 3,931 cusecs in the first stage. The channel traverses a steeply inclined tract in the head reach and 15 falls with an aggregate drop of 10.7 metres have been provided at suitable distances. It has a section of 12.2 metres bed width and 3.4 metres depth of water in the head reach, which is increased to 4.6 metres lower down. The bed width is later reduced to 7.3 metres. Other masonry works, which make a total of 86, include 20 drainage crossings of capacities varying from 400 cusecs to 3,300 cusecs below the canal for flood water, 10 district road bridges, 35 village road bridges, one foot bridge, one national highway bridge near Karnal, one rail-road bridge on the Ambala-Panipat-Delhi railway line, one cross regulator, one head regulator, one outfall, 7 falls and 8 fall-cum-bridges. All the masonry works on the canal have been designed to carry finally a discharge of 4,500 cusecs, which is the anticipated *rabi* discharge of Western Jumna (Yamuna) Canal.

Unit-II : Tubewells

168 tubewells of capacity varying from 2 to 5 cusecs have been installed for a total installed capacity of about 660 cusecs and a firm pumping capacity of 500 cusecs. These tubewells, drilled up to depths varying from 91.4 metres to 228.6 metres for tapping maximum discharge from water-bearing strata, have been developed with high capacity pumps.

Unit-III : Underground Tubewells Channels

Water from the augmentation tubewells installed along the canal is delivered directly into the canal. The tubewells along the cross lines have been connected through underground RCC Hume pipes. The total length of the underground pipe channel is about 20 kilometres.

Unit IV : Diversion of Existing Tubewells

Of the existing 301 Augmentation Tubewells along the Western Jumna (Yamuna) Canal, which lie in the reach of the Augmentation Canal, the tubewells on the left hand side of the Western Jumna (Yamuna) Canal, have been

diverted to the Augmentation Canal except the tubewells proposed to be utilized for feeding the existing offtaking channels of the Western Jumna (Yamuna) Canal. The tubewells along the right hand side of the Western Jumna (Yamuna) Canal are proposed to be diverted to the Augmentation Canal by taking the water supplies across the Western Jumna (Yamuna) Canal. Water from the tubewells in the lower reaches is proposed to be diverted into the Narwana Branch Karnal Link through the old Nardak Distributary and Jundla Minor so as to save the construction of a new channel passing through valuable agricultural land near Karnal.

This is the first project in India whereby conjunctive use of ground water and surface water has been attempted on a large scale. It would benefit not only the entire area at present covered by the Western Jumna (Yamuna) Canal System, but also provides perennial irrigation to the Jui Canal in the Bhiwani district. It will also bring an additional area of 55,800 hectares under irrigation. It also improves the capacity factors and consequently the yield of the crops in the existing culturable commanded area of 10,16,000 hectares of the Western Jumna (Yamuna) Canal System. Finally, the project will help in reclaiming some 2,000 to 4,000 hectares of water-logged area along the existing Western Jumna (Yamuna) Canal providing additional area for food production.

The project was inaugurated on the 10th January, 1973 by Shri D.P. Dhar, Union Planning Minister. Ever since its commissioning, the Augmentation Canal has been running during *rabi*, as originally conceived. However, flood waters are additionally passed to meet the demand of irrigation downstream in the *kharif* season also.

HARYANA MILK FOODS, PEHOWA

A public limited company with an authorised capital of Rs. 1 crore, it was incorporated in 1955-56 under the name and style of Kailash Chemicals and Textiles Mills Limited. Though registered as a public limited company, it functions more or less in a co-operative style. It has about 1,000 shareholders most of whom hail from the rural areas. It has been licensed by the Government of India, Ministry of Industrial Development, for the manufacture of 800 tons of whole/skim milk powder, 1,200 tons of milkfoods and 1,000 tons of condensed milk besides *desi* ghee, butter, etc.

The company set up its plant in the rural sector at Pehowa and started production in December 1970. The intake capacity of this plant is 50,000 litres of milk. The following figures show the procurement of milk and

Chapter V

INDUSTRIES

OLD-TIME INDUSTRIES

The main occupation of the people in the district has been agriculture. In the past only a few industries and that too on a cottage scale, engaged a minority of the population. Woollen blankets and brass and copper utensils were made at Panipat, lacquerware at Kaithal, shoe and leather goods at Karnal and pottery at Panipat and Karnal. A certain amount of glass blowing was done at Panipat and Karnal and saltpetre refining at Kaithal, Panipat and Thanesar.

Woollen blankets.—Wool spinning and wool weaving has been one of the major cottage industries of the district. From time immemorial, Panipat has been an important blanket weaving centre. The weavers used handspun yarn till 1942 when a power-operated woollen yarn spinning unit was established. The industry progressed as the defence requirement for barrack blankets increased. The wool was procured from the Punjab, Rajasthan and the South. Blankets of ordinary quality were exported to other districts in small quantities until the World War II raised the demand for barrack blankets to the extent of 10,000 per day. This industry was dislocated by the emigration of the Muslims at the time of the Partition, but was gradually revived by the displaced wool merchants from West Punjab (Pakistan) who settled at Panipat.

Brass and copper utensils.—Panipat had been for long famous for the manufacture of copper and brass utensils. These were largely exported to the Delhi market. Lockwood Kipling, Principal of Lahore School of Arts, described this industry as follows :—

“Panipat has long been noted for small wares in metal of various kinds. A peculiar kind of bead-like ornament known as *motis* or pearls, skilfully made in thin silver is one of the specialities of the place. A necklace of six rows costs about Rs. 30, of three rows about Rs. 10. There is no chasing on ornament of any kind, but the silver is a good colour and the beads are

perfectly round. Captain Roberts reported in 1882 that this small industry was declining. Betel nut cutters (*sarotas*) are here made in fanciful forms, the handles being of brass with quaint projections, in which small mirrors and pieces of coloured glass are fixed. A good one costs two or three rupees. Scissors are similarly ornamented; the handles being made of brass with bits of coloured glass rudely simulating jewels set therein. A pair of scissors costs about 6 annas. These articles are made for export."

Lacquerware works.—Lacquerware toys, household utensils and the legs of *charpoys*, were manufactured at Kaithal and in the surrounding villages.

Glass-blowing.—Karnal district was well known for glass-blowing and the glass was used for mirror-worked walls and also sewn into *phulkaris*. Lockwood Kipling, wrote in 1892:

"Karnal itself has long had a name for glass blowing. The silvered globes of thin glass, which, when broken up are used for mirror-worked walls and also sewn into *phulkaris*, are invariably said to come from Karnal. In the descriptive catalogue of the Punjab contributions to the Calcutta Exhibition, 1883-84, Mr. Baden Powel wrote :—"In Karnal rude globes are made for ornaments, the inside being silvered with quicksilver and tin-foil; the large aperture necessary for the manipulation is awkwardly covered with ozidue. The Karnal glass-makers also prepare the large, thin, pearshaped glass retorts or carboys, in which the native manufacture of salammmoniac (*naushadar*) is effected...."

There were glass-blowing factories at Panipat and Karnal¹. In 1944-45, another glass-blowing factory was set up at Shahabad (Shahbad). However, the shortage of skilled labour forced these factories to close down.

Shoes and leather goods.—Karnal was famous for its shoe-making. Thousands of boots were supplied to army regiments when Karnal was a cantonment station. Shoe-making is still carried on in various parts of the district as a cottage industry.

Pottery.—The village pottery is as old as the country itself and the

1. Glass was also made at Gumthala and a small village adjoining Gumthala is called Kheri Sheeshgaran (the village of glass blowers).

ordinary vessels for villagers' use, including the earthen buckets for Persian wheels and small bricks, were made by village potters. Special kinds of glazed-art pottery such as tea-pots, cups and other fancy articles were made at Panipat and found a ready market at fairs and festivals. Tiles and flower-pots were made in Sadar Bazar, Karnal.

Saltpetre.—Saltpetre was manufactured around Panipat, Kaithal and Thanesar by the indigenous process. After the Partition, a few factories for manufacturing and refining saltpetre on modern lines were set up at Kaithal, Thanesar and Shahabad (Shahbad).

Besides, the district was known for its distillery and the manufacture of salammoniac (*naushadar*).

Most of these industries except shoe-making and blanket manufacturing decayed after the Partition owing to the skilled Muslim artisans having migrated to Pakistan. In this way the Partition almost impaired the economy of the district. This loss was made good when people rehabilitated here from Pakistan began to set up factories. Factory accommodation was provided to them in the industrial area at Panipat and the industrial estate at Nilu Kheri (Nilo Kheri). Financial assistance was provided under the State Aid to Industries Act, 1935, and for the training of persons in technical and vocational trades.

GOVERNMENT ASSISTANCE TO INDUSTRIES

Financial assistance.—After Independence, the provisions of the State Aid to Industries Act, 1935, were liberalised. A provision to advance loans up to Rs. 1,000 against a certificate of credit-worthiness was introduced for the benefit of village artisans and craftsmen. The Haryana Financial Corporation provides financial assistance to large and medium-scale industries and the State Bank of India advances loans to small-scale industries against the security of raw material, finished goods, etc. Besides, the Khadi and Village Industries Board advances loans and grants for the promotion of village industries. The following amounts were disbursed during 1962-63 to 1969-70 :—

Year	Loans	Subsidies
	(Rs.)	(Rs.)
1962-63	1,31,000	3,520
1963-64	1,72,360	8,200

(Figures in lakhs)

The company employs about 200 skilled, semi-skilled and unskilled staff and provides indirect employment to about 10,000 rural families who supply milk to the plant. It arranges financial assistance for the dairymen and also provides veterinary facility to help them in the upkeep of their livestock.

Milk being a highly sensitive food item has to be processed within a given time to save it from getting soiled. Thus besides being a highly sophisticated plant, it is run without a break round the clock in three shifts.



सत्यमेव जयते

Year	Loans	Subsidies
	(Rs.)	(Rs.)
1964-65	2,50,000	—
1965-66	1,96,000	—
1966-67	1,71,200	—
1967-68	1,63,500	—
1968-69	29,99,150	..
1969-70	32,99,017	..

Supply of machinery on hire-purchase basis.—The National Small Industries Corporation, an agency founded and controlled by Government of India, supplies machinery to small-scale units on hire-purchase basis on easy terms on the recommendations of the State Government. After the initial payment of twenty to forty per cent of the total cost of machinery and equipment by the loanee, the remaining amount is paid by him in easy annual instalments.

Supply of raw material.—The supply of raw material like iron, steel, steam coke, hard coke, copper, zinc, etc., is regularly made to quota-holders and deserving industrialists. The quota is fixed after proper assessment. The requirements of imported raw material and equipment are assessed by the State Government and necessary recommendations made to Government of India for import licences.

Quality marking.—Quality marking scheme was introduced by the Government with a view to promoting the sale of standard goods. A quality marking centre for furnishing fabrics was set up at Panipat in 1957. It extends technical assistance and guidance to the textile industries in the selection of raw material, manufacture of yarn and finished goods. An up-to-date laboratory has been installed at the centre where tests are conducted in respect of fibres, yarns and manufactured cloth. The quality marking centre maintains a show-room to display different types of finished fabrics produced by the mills registered under the quality marking scheme.

Industrial estates.—Three industrial estates were established by the Government: Industrial Estate at Nilu Kheri (Nilo Kheri) in 1962, Rural Industrial Estate at Kaithal in 1965 and Rural Industrial Estate at Kohand in 1967. In these estates, industrial sheds were constructed and were let out

to those intending to put up industrial units—14 at Nilu Kheri (Nilo Kheri), 12 at Rural Estate, Kaithal (7 to different industrialists on rental basis and the remaining 5 to Rural Industrial Development Centre and Rural Artisans Training Centre) and 8 at Kohand.

Industrial Training.—Government has established a number of institutes for industrial training and technical education in the district to provide training facilities in various crafts. The details of technical institutes and courses/crafts in which training is imparted, are given in Chapter on 'Education and Culture'.

Eight peripatetic demonstration parties (two for hosiery goods, three for leather shoe-making, and one each for soap making, carpentry and weaving) are working in various blocks to provide latest technical know-how to rural artisans. Training is imparted for a period varying from 3 months to one year depending on the trade.

There are 7 training centres: two for leather tanning; two for footwear making; two for soap making; and one for *durrie* and *khes* making located in various blocks. The trainees, after successful training, are encouraged to start their own work. A leather tanning-cum-common facility workshop functions at Pundri (Pundri Block). The workshop renders service in leather tanning to the local tanners. Besides, there are three rural industrial development centres: one for leather goods at Kaithal, one for light engineering goods at Samalkha and one for engineering works at Kohand.

SOURCE OF POWER

Since the beginning of the present century, power generated mostly from diesel oil was used in installations for flour grinding, oil seed crushing, *dal* grinding, rice husking, grain grinding and saw milling. In the thirties, electricity was made available through the establishment of some thermal and diesel generating stations. These were privately owned and Government gave them long term contracts for generation and supply of electricity to various towns. There were, on the eve of Independence, the following three electric supply companies in the district :—

The Kaithal Electric Supply Company Ltd., Kaithal.—Licensed in 1936, the company established a generating station in 1937. The power station had 4 sets of diesel engines with a capacity of 259 kw. The supply of hydro-electric power from Bhakra Nangal Project was given to the company in 1956 and thereafter the diesel stations were just kept as a stand-by. After the lapse of contract in 1966, the company was taken over by the Punjab State Electricity Board.

The Karnal Electric Supply Company Ltd., Karnal.—The company established a generating station in 1935 for the supply of electricity to the Karnal town. The power supply was, however, taken over by the P.W.D. Electricity Branch in March 1949. Between 1954 and 1956, the supply of electricity was obtained from the Panipat Station. The hydro-electric power from Bhakra Nangal Project was made available to the town in 1956.

The Panipat Electric Supply Company Ltd., Panipat.—The company, licensed in 1934, established a power generating station in 1936 and installed two diesel engine sets with a capacity of 310 kw. The generating station was taken over by the Government in 1954. It was energised with hydro-electric power in 1955.

In 1948, Nilu Kheri (Nilo Kheri) Administration established a generator with a capacity of 3 kw to provide electricity to the new township. Later, two generating sets with a capacity of 30 kw replaced the previous generator. The hydro-electric power was supplied to the township in 1955.

In 1968, the whole supply of electricity to the Karnal district was that of the hydro-electric power from Bhakra Nangal Project. It was controlled by six electricity divisions, two at Karnal, two at Panipat and one each at Kaithal and Kurukshetra. Besides, there is another divisional office (Shahbad Division) at Shahabad (Shahbad). The Panipat grid sub-station which was of 132 KV initially, was raised to 220 KV in 1962 in view of the growing industrial needs. In addition to this, there are four 66 KV grid sub-stations and fifteen 33 KV grid sub-stations in the district¹. The power actually sold was 788.76 lakh units in 1967-68, 1,147.67 lakh units in 1968-69 and 1,608.92 lakh units in 1969-70.

NEW INDUSTRIES AND MANUFACTURES

LARGE AND MEDIUM-SCALE INDUSTRIES

In 1969-70, the following factories were working in the district :—

The Panipat Co-operative Sugar Mills Ltd., Panipat.—It was established on co-operative basis in 1957 with an investment of Rs. 1.07 crores. The shares are held predominantly by the cane growers. The area around Panipat is rich in sugarcane and fully meets the demand of the factory. In 1969-70, the factory employed 1,000 workers on an average and its annual production was worth Rs. 2.38 crores. In order to utilise molasses, which is a

1. For details see Chapter on 'Other Departments'.

by-product, this concern set up a distillery in 1969 at a cost of Rs. 40 lakhs. It has an installed capacity of 3,300 gallons of rectified spirit per day.

M/s Shambhu Nath & Sons Ltd., (Manufacturers of Acids and Chemicals), Shahabad (Shahbad).—The unit was set up in 1958 with an investment of about Rs. 12 lakhs. It manufactures sulphuric acid and its by-products. In 1969-70, the unit gave employment to 55 persons and its production was worth Rs. 15 lakhs.

M/s Karnal Distillery Co. Ltd., Karnal.—The distillery was started in 1900 with a capital investment of Rs. 4 lakhs. The process of manufacture involves fermentation of molasses obtained from sugar mills. The yeast thus formed is distilled in patent stills and converted into alcohol. Some of it is sold as methylated spirit whereas a major part of it is converted into wine. In 1962-63, the distillery employed 90 persons and its annual production was worth Rs. 2.96 lakhs. However, in 1969-70, the employment increased to 104 while the production decreased to Rs. 2.49 lakhs. The fact that the distillery remained closed from 22nd January, 1969 to 24th May, 1969 and then again from 8th January, 1970 to 15th July, 1970 due to the non-availability of molasses, explains the decrease in the production. The sales of the distillery are regulated through the Excise Department.

Karnal Card Board Industries, Charao (Karnal).—This factory was established at Charao about 6 kilometres from Karnal in 1964 with a capital investment of Rs. 6.50 lakhs. It manufactures card board and mill board. In 1969-70, the factory employed 66 persons on the average and its annual production was worth Rs. 8.55 lakhs.

Solvex Oil and Fertilizers, Karnal.—This unit was commissioned in 1964 with a capital investment of Rs. 10 lakhs. It extracts oil from ground nut and rice bran with the help of solvent hexane. The oil is mainly marketed in Delhi and the de-oiled cakes are exported to foreign countries as poultry and cattle feed. In 1969-70, the factory employed 50 persons on an average and the annual production was worth Rs. 24.22 lakhs.

SMALL-SCALE INDUSTRIES

Woollen goods.—The woollen industries are centralised at Panipat. In 1969-70, there were 50 wool spinning and weaving units working with a capital investment of more than one crore rupees. These manufacture a lot of barrack blankets and blanketing cloth for which there was a great demand from the defence services. To meet this demand the spindles increased

from 6,000 to 10,000 and handlooms to 500. The number of persons employed was 1,580 and the annual production was worth Rs. 1.25 crores. The woollen and finishing centre set up at Panipat by the State Government to improve the quality of woollen goods helped these units to produce attractive designs and offered finishing service.

There were two presses with a capacity of pressing eight thousand bales annually. These were originally started for pressing cotton bales but later switched over to the pressing of woollen bales.

Twenty other units were engaged in the manufacture of blankets, *loies* and *shawls* for civil requirements. These units did not have their own spinning plants and bought yarn from spinning mills. The annual production of these units was estimated at Rs. 20 lakhs and these employed 450 persons in 1969-70.

Agricultural implements.—This industry exists on small-scale as well as cottage basis. The small-scale units are located at Samalkha, Karnal, Panipat and Kaithal. These units manufacture harrows, chaff cutters, etc. The cottage units are located in villages all over the district and manufacture *kassies*, *khurpas* and sickles — articles of common use to the agriculturists.

In 1964-65, there were 289 units employing more than 1,000 persons and the annual production was worth Rs. 190 lakhs. The industrial recession thereafter affected these industries adversely. Production fell during 1966-67 and was worth Rs. 85 lakhs. Only 554 persons were employed. Fortunately the recession was short-lived. With agricultural break-through in 1969-70, the number of units increased to 275, the number of workers employed to 1,250 and the annual production to Rs. 380 lakhs.

Cycle parts.—The industry is of recent origin. The first bicycle assembling unit was established in 1954 at Panipat with an investment of Rs. 1.5 lakhs. Gradually, some more units were established at Panipat and Karnal which manufacture cycle parts such as pedals, cycle stands, chain covers and mud-guards.

This industry in the district faces acute competition from Jullundur and Ludhiana (Punjab) and Sonipat (Sonepat) in the Rohtak district. It is also handicapped by non-availability of proper categories of steel which has resulted in the closing down of some units.

During 1969-70, there were five units which employed 48 persons and produced goods worth Rs. 2.50 lakhs.

Sewing machines and sewing machine parts.—In 1969-70, there was only one unit at Kaithal engaged in the production of sewing machine parts and assembling of sewing machines. This unit employed 24 persons on an average and its annual production was worth Rs. 2.15 lakhs.

Steel re-rolling.—There is only one unit at Panipat, which is engaged in the re-rolling of steel. The unit was started in 1950 with a capital investment of Rs. 2.5 lakhs. In 1969-70, it gave employment to 33 persons and its total production was worth about Rs. 12 lakhs.¹

Nuts, bolts and bifurcated rivets.—The industry is of recent origin and the first unit was established at Panipat in 1957 with a total investment of Rs. 1.5 lakhs. In 1969-70, there were four such units which employed 115 workers and produced goods worth Rs. 25 lakhs.

Electric cables.—The industry is of recent origin and the first unit was set up at Panipat in 1958. In 1969-70, there were four units and these manufactured rubber insulated and braided electric wires and cables. The production of these units was worth Rs. 2.37 lakhs and their employment was about 35 persons.

Scientific instruments.—There are only two units engaged in the production of scientific instruments. These are located at Panipat and Ladwa. These manufacture porcelain scientific goods and microscopes. In 1969-70, these units employed 15 persons and produced goods worth Rs. 50,000.

Rubber goods.—This industry was started in 1960-61. There were five units in 1964-65. The unit at Karnal had an investment of Rs. 1.5 lakhs and manufactured rubber soles and heels. The other units at Panipat were engaged in the manufacture of electric cables, *chappals* and rubber tubings.

In 1969-70, only one unit at Kaithal functioned and manufactured heels and soles for footwear. The unit produced goods worth Rs. 3.80 lakhs and employed 55 persons.

Conduit pipes and industrial tubings.—Industrial development necessitated a demand for conduit pipes for electric wiring and industrial tubings.

1. Two more re-rolling mills were set up at Samalkha in 1969 with an investment of Rs. 5.84 lakhs and 9.15 lakhs respectively.

There are seven units engaged in the manufacture of these items and all of them are located at Panipat and Kurukshetra. The conduit pipes are marketed all over the country but the industrial tubings are supplied to iron and steel factories at Tatanagar, Durgapur, Bhilai and Rourkela. In 1969-70, 400 persons were employed in these units and the production was worth Rs. 1.05 crores.

Steel furniture.—The industry is concentrated at Panipat. It started in the district after the Partition when the industrialists who manufactured steel fabrications in Gujranwala (Pakistan) came here. The items manufactured include steel cabinets, piped chairs, safes, racks, almirahs, wheel barrows, post office letter boxes and trollies. In 1969-70, there were eleven units which employed 117 persons and the turn-over was worth Rs. 18.5 lakhs.

Radio.—Restrictions on the import of assembled radio sets gave an incentive to this industry in almost all the important towns of the State. Besides assembling radio sets, coils and wire resistors are manufactured. In 1969-70, there were eight units employing about 16 persons. Despite a cut-throat competition, the industry succeeded in manufacturing and selling goods worth Rs. 22,000.

A unit at Panipat has been experimenting with automatic remote (wireless) control system and has succeeded in making some novel devices such as automatic fire alarm, automatic water tap, burglar alarm, etc. The unit has also successfully manufactured a miniature tape-recorder.

Wood-wool.—There is only one unit at Panipat and it prepares wood-wool from timber logs for packing purposes. It employs 12 persons. In 1969-70, goods worth Rs. 2.40 lakhs were produced. Most of the production of the unit is consumed by the porcelain units at Sonipat (Sonepat) and Delhi.

Printing industry.—There are about 28 small-scale printing presses located at Karnal, Panipat, Thanesar and Kaithal. None of these has offset printing arrangements. These units are mostly engaged in the printing of account books, vouchers, letter heads and hand bills. They usually do job work. This industry provides employment to about 90 persons. Besides, there is a Government of India Press at Nilu Kheri (Nilo Kheri) engaged in Government jobs, which employed 290 persons during 1970-71.

COTTAGE AND VILLAGE INDUSTRIES

Handloom weaving (cotton).—Handloom weaving is done both on

cottage as well as small scale. There is a huge concentration of handlooms at Panipat where goods worth Rs. 2 crores annually are produced on some five thousand handlooms engaged in the manufacture of bed sheets, *kheses*, tapestry, curtain cloth and other furnishing fabrics. Some of the goods produced are extremely well designed and finished. With the rising popularity of handloom products, Panipat has become well known all over the country for its exquisite designs of tapestry, furnishing fabrics, etc. These are marketed all over the country and a good portion of its production is exported. Besides, some handlooms are functioning at Nilu Kheri (Nilo Kheri) and in villages. The goods in villages like *kheses* and plain sheets are produced on pit-looms. The handlooms at Panipat and Nilu Kheri (Nilo Kheri) are of fly shuttle type. The industry provides employment to 10,000 persons.

Shoe and leather goods.—Shoe-making is one of the oldest cottage industries carried on by Harijan workers. It exists in rural as well as urban areas. The urban units are engaged in the manufacture of shoes whereas the rural units manufacture *jootis*. The district is popular for fine shoes and a few units at Karnal sell these to neighbouring districts and States.

In the absence of a tannery in the State, chrome leather and lining of Kanpur and Madras tanneries are consumed by the shoe-makers. The sole leather is, however, obtained from local tanners. The *jootis* in rural areas are made out of the leather tanned locally.

In 1969-70, 1,150 units employing 1,500 persons were functioning in the district. The total production in 1969-70 was worth Rs. 35 lakhs.

Ban and rope making.—Ever increasing prices of these commodities are attracting more and more persons to this trade. In 1969-70, 95 units manufactured *ban* with hand-driven machines. About 95 workers were engaged in this industry and the total production was worth Rs. 0.56 lakh.

Leather tanning.—This old industry continues on cottage basis in villages and urban areas. Tanning is mostly in the hands of Khatiks and Rehgars. The main raw materials consumed are raw hides, *babul* bark, lime salt, etc. The tanning process in vogue is very crude and the product is thus generally rough and spongy and cannot fetch a good price. It is consumed mostly by local shoe-makers. During 1969-70, about 1,050 units were engaged in this industry and it gave employment to 1,385 persons. The total production was worth Rs. 11.08 lakhs.

Gur and Khandsari making.—*Gur* and *khandsari* making, a seasonal industry, is carried on in almost every village. The sugar mill at Panipat

has been drawing most of the sugarcane crop in the district. However about 325 units are engaged in the production of *gur* in rural areas. During 1969-70, 1,008 workers were engaged in this industry and they produced *gur* and *khandsari* worth Rs. 32.56 lakhs.

HANDICRAFTS

Woollen carpets.—In 1969-70, four units were engaged in the production of woollen carpets at Panipat. About 53 persons were employed and the goods produced were worth Rs. 3.50 lakhs. Due to the paucity of demand and acute competition from Mirzapur and other places in Uttar Pradesh, these units worked much below their capacity.

Ivory goods.—The craftsmen engaged in making ivory goods manufacture articles like buttons, bangles, flower vases, scent bottles and other artistic goods. In 1969-70, nine units were functioning in the district which employed 21 persons and produced goods worth Rs. 0.23 lakh.

AGRO-BASED INDUSTRIES

Rice milling.—The district abounds in paddy crop and therefore, rice milling is one of the important agro-based industries. In 1969-70, there were 94 rice shellers and 875 rice hollers working in the district. These units gave employment to 2,303 persons and their output was estimated at Rs. 92.71 lakhs per annum.

Cotton ginning.—Kaithal area being rich in cotton crop, three cotton ginning factories ginned and pressed 50,000 bales in 1969-70 and provided employment to 350 persons. The pressed cotton was sent to the textile mills at Bombay (Maharashtra) and Ahmedabad (Gujarat).

Oilseed crushing.—In 1969-70, the only two oil expelling units were located at Kaithal besides about 50 power driven *kohlus* scattered all over the district which usually did job work. These units procured edible oilseeds worth about Rs. 5.5 lakhs. The industry provided employment to 125 persons.

Flour milling.—Only one flour milling unit is located at Karnal. It was established in 1969 with an investment of Rs. 5 lakhs. Its output in terms of money is estimated at Rs. 1.8 lakhs. It provides employment to 18 persons.

There are many other industries in small-scale and cottage sector. Information about industry-wise number of units, average employment and

production during the years 1964-65 to 1969-70 is given in Table XIX of Appendix.

TOWN-WISE DISTRIBUTION OF INDUSTRIES

In 1971, the following important industries were located in various towns of the district :—

Tahsil	Town	Industries
Karnal	Karnal	Large and Medium-scale: Distillery, Card Board, Rice Bran, Oil Extraction, and Shoe-making. Small-scale: Handlooms, Harrow Discs, Sodium Silicate and Soap-making, Fire Extinguishers, Electrical Instruments, Barbed Wire, Rubber Goods, Shoe-making, Leather Goods, Motor Stamping, Transformer Stamping, Wire Netting, Flour Milling, Agricultural Implements, Cycle Parts, Rice Milling, Printing, and Saltpetre-making.
	Gharaunda	Small-scale: Rice Milling, Surgical Cotton-making, and Foundry.
	Nilu Kheri (Nilo Kheri)	Small-scale: Pints making, Agricultural Implements, P.V.C. Pipe, Rice Milling, and Handloom Weaving (Cotton).
Panipat	Panipat	Large and Medium-scale: Sugar, Distillery, Dehydrated Vegetables, Wool and Spinning, and Steel Tubes. Small-scale: Woollen Weaving and Furnishing Fabrics, Woollen Blankets, Handloom Weaving (Cotton), Agricultural Implements, Steel Furniture, Nuts and Bolts, Steel Pipes, Steel Re-rolling, Conduit Pipes, Cycle Parts, Electrical Cables, Radios, Scientific Instruments, Wood-wool, Water Pipe

Tahsil	Town	Industries
		Fittings, Plastic Goods, Rubber Goods, Copper Liners, Printing and Printing Press-making, Woollen Carpets, and Sports Goods.
	Samalkha	Small-scale: Chaff-cutter Machines, Steel Re-rolling, and Cycle Tyres and Tubes.
	Thanesar	Large and Medium scale: Solvent Oil Extraction. Small-scale: Conduit Pipes, Printing, and Rice Milling.
	Shahabad (Shahbad)	Large and Medium-scale: Vanaspati Ghee and Acids and Chemicals. Small-scale: Chemicals, Rice Milling, Agricultural Implements, and Saltpetre-making.
	Ladwa	Small-scale: Agricultural Implements, Scientific Instruments, and Rice Milling.
Kaithal	Kaithal	Small-scale: Agricultural Implements, Cycle Parts, Sewing Machines, Cotton Ginning and Pressing, Printing, Utensils, Radios and Radio-parts, Saltpetre-making, Dal-making, Handloom Weaving, Rubber Goods, Oilseed Crushing, Leather Tanning, Shoe-making, and Leather Goods.
	Pehowa	Large and Medium-scale: Milk Food Products. Small-scale: Diesel Engines and Rice Shellers.

INDUSTRIAL LABOUR

Industrial labour in the district is mostly drawn from displaced persons

from the Pakistan, neighbouring villages and Uttar Pradesh. Displaced persons either reside in Government-built hutments or newly set up colonies around the towns. Rural labourers from nearby villages, whether engaged on full time or part-time basis, normally return to their homes daily after work. The newly set up factories thus provide subsidiary occupation to partially employed agricultural labour. Poor labourers from Uttar Pradesh live in overcrowded rooms near their place of work, and remit a sizeable part of their earnings home.

Industrial training institutions and industrial schools opened by the Department of Industries now increasingly meet the demand for skilled labour. This is greatly helping the development of industries.

Industrial labour in the district has sometimes to go without work owing to the closing down of some factories due to the non-availability of raw material or lack of finances. Also, the seasonal character of some of the industries does not offer regular employment.

Strikes and lock-outs resulting from disputes between the employers and the employees are scarce although labour is reasonably well organized. In 1969-70, the following unions of the industrial workers were working in the district :—

Karnal Distillery Workers Union, Karnal
Karnal Press Workers Union, Karnal
Karnal Rice, Oil, Cotton and Flour Mills Workers Union, Karnal
Engineering and Foundry Workers Union, Panipat
Industrial Workers Union, Panipat
Sugar Mills Karamchari Union, Panipat
Sugar Mills Mazdoor Sangh, Panipat
The Panipat Sugar Mills Mazdoor Sabha, Panipat
Woollen Workers Union, Panipat
Woollen Mazdoor Sabha, Panipat
The Wool Khadi Workers Union, Panipat
Textile Mazdoor Sangh, Panipat
Weavers Union, Nilu Kheri (Nilo Kheri)

Rates of wages prevailing in the district vary according to supply and demand at the time of employment. The wages of skilled labour range between Rs. 5 and Rs. 7 per day whereas unskilled labourers get Rs. 3 to Rs. 4 per day.

INDUSTRIAL CO-OPERATIVES

The development of industrial co-operatives is looked after by the Industrial Assistant Registrar, Karnal, who is assisted by 5 Industrial Inspectors and 21 Sub-Inspectors. Industrial co-operatives have made considerable progress in the district. The following table indicates the number of industrial co-operative societies working in March 1970 :—

Serial Number	Name of industry	Number of societies (as on March 31, 1970)
1	Handloom Weaving	125
2	Small-scale Industries	158
	(a) Leather Goods	—
	(b) Engineering Industries	33
	(c) Wood Work	16
	(d) Miscellaneous (brick kilns, hosiery, etc.)	109
3	Khadi and Village Industries	239
	(a) Non-edible Oils and Soap Industries	20
	(b) Pottery	6
	(c) Bee Keeping	1
	(d) <i>Gur</i> and <i>Khandsari</i>	43
	(e) <i>Palm Gur</i>	2
	(f) <i>Ghani</i> Oil	15
	(g) Cobblers	105
	(h) Leather Tanning and Flaying of Skins	24
	(i) Hand Pounding of Rice	10
	(j) Others	8
	(k) Khadi Spinning	5
4	Handicrafts and Women Handicrafts Societies	39
		<hr/> 561 <hr/>

The value of the goods produced by these societies during the years 1965-66, 1966-67, 1967-68 and 1969-70 amounted to Rs. 13.96 lakhs, Rs. 11.73 lakhs, Rs. 34.59 lakhs and Rs. 122 lakhs respectively.

Owing to the great concentration of handloom weaving co-operative societies at Panipat, the workers experienced much difficulty in securing living accommodation at reasonable rates. To overcome this difficulty two weavers colonies comprising 20 and 28 houses were built in 1960-61 by the Khadi Wool Weavers Co-operative Industrial Society, Panipat and Panipat Co-operative Industrial Union respectively. Government assisted these societies in their effort by advancing loans.

Judging from the progress in the field of industries, particularly large and medium-scale industries, it can be surmised that the outlook of future industrial development is quite bright.





सत्यमेव जयते

Chapter VI

BANKING, TRADE AND COMMERCE

BANKING AND FINANCE

INDIGENOUS BANKING

Indigenous banking, as elsewhere, is done by individual bankers in towns and money-lenders (*sahukars*) in villages. The former receive deposits, deal in *hundis* and also finance trade and industry against the security of goods. They are quite particular about the purposes for which they advance loans. The money-lenders in villages mainly finance consumption. Despite this difference, their operations are very similar. Functioning in an unorganised manner, they have adapted themselves to the customs, habits and needs of their local clients. Their business, being hereditary, is often carried on as a family concern. They generally rely on their own resources and, if necessary, borrow money from one another and even from joint-stock banks by re-discounting *hundis*. As the banks impose rigid conditions, these indigenous agencies do not often resort to them. The bazaar *hundis* rate (*i.e.* the rate at which indigenous bankers discount *hundis*) is invariably different from the bank rate.

The village economy being traditionally controlled by the *sahukar*, the poor peasantry was at his mercy for all their financial needs. As a shopkeeper the *sahukar* preferred to have a lien on the agricultural produce. He could in this way profit twice, once by buying cheaply from the producer to whom he had lent money, and then by selling it at a higher rate to individual consumers or in a *mandi*.

After 1870, when land became a profitable investment, the *sahukar* began to tighten his financial hold in such a way as eventually to oust the rural debtors from their lands. He imposed such strict terms that a mortgage invariably ended in a sale. Government tried to improve this situation by passing the Land Alienation Act, 1900¹, which debarred the acquisition of the mortgaged land by *sahukars*. The Act checked their underhand activities

1. The Land Alienation Act, 1900, was repealed in 1950.

but did not help the peasantry. The *sahukar* now deprived of land as security, did not risk to lend more than the produce from the land could cover up. The vacuum thus created was filled by a new class of agriculturist money-lenders. The big agriculturists who had become rich on account of high prices and the ex-servicemen and retrenched service personnel returning home with sufficient money, turned into money-lenders. As the Act did not apply to this class of money-lenders, they exploited the peasantry in the manner of their predecessors, the *sahukars*. Gradually, the bulk of the mortgage-debt passed into the hands of the agriculturist money-lenders, and by 1920 half of the then agricultural debt of the district had been lent by them.

The Government took various steps to counteract this position and to relieve the position of indebtedness, set up co-operative agencies. But these did not have adequate funds to meet the requirements of rural finance. Besides, co-operative loans were given only for productive purposes whereas a money-lender accommodated the farmers for unproductive purposes also on personal surety and on the security of produce, land, ornaments or property. Generally, loans were advanced up to 60 to 70 per cent of the value of the property pledged. In some parts of the district where loans were given against the produce, the principal as well as the interest was recovered in kind. In the case of loans advanced on personal surety the rate of interest was much higher than that charged by the co-operative societies. It ranged from 12 to 36 per cent whereas the co-operative societies charged 6 to 9 per cent.

Apart from setting up co-operative agencies, the Government regulated indigenous financing through various legislative measures, such as the Usurious Loans Act, 1918 ; The Punjab Regulation of Accounts Act, 1930 ; The Punjab Relief of Indebtedness Act, 1934 ; The Punjab Debtors' Protection Act, 1936 and The Punjab Registration of Money-Lenders' Act, 1938. Unfortunately, the money-lenders could still by-pass the provisions of these anti-usuary laws. They indulged in various mal-practices. Most transactions were either oral or against ornaments; promisory notes were obtained for a higher amount than what was actually advanced; even duplicate accounts were kept. All money-lenders did not obtain licences by getting themselves registered with the Collector. They did not maintain regular accounts. In 1969-70, there were only 123 licenced money-lenders in the Karnal district although their actual number was much higher.

In addition to the co-operative agencies, institutions like the Khadi and Village Industries Commission provide credit facilities in rural areas.

It also advances *taccavi* loans for seed, cattle, or agricultural improvements under the Land Improvement Loans Act XIX of 1883 and the Agriculturists' Loans Act XII of 1884.

In industrial areas, the loans are advanced under the Punjab State Aid to Industries Act, 1935, for the promotion of industries. The loans are also advanced to the industrialists by the Haryana Financial Corporation, Chandigarh, which came into being on April 1, 1967 on reorganisation of the former Punjab Financial Corporation. It has a paid-up capital of Rs. 1 crore. The loans disbursed by it in the Karnal district, are shown below :

Year	Number of units	Amount (Rs.)
1967-68	—	—
1968-69	6	8,79,500
1969-70	11	23,21,000

CO-OPERATIVE CREDIT

After the enactment of the Co-operative Societies Act, 1904, the first co-operative society was registered at Siwan in 1910 under the name of the Co-operative Thrift and Credit Society. The Co-operative movement gained momentum when the subsequent Acts of 1954 and 1961 were passed. In 1968, there were 1,325 Co-operative Credit Societies in the district, 1,204 being agricultural and 121 non-agricultural. Similar figures for 1969 were : 1,323, 1,202 and 121 respectively. These included agricultural thrift and credit societies, agricultural multi-purpose societies and agricultural co-operative service societies. They provided adequate facilities for short and medium term credit for fertilizers, improved seeds, better implements, marketing and storage and extension of advanced agricultural techniques.

The non-agricultural co-operative societies comprise urban banks, employees credit societies and others catering to the credit requirements of non-cultivating section of the population in urban and rural areas.

The number, membership and working of agricultural and non-agricultural credit societies are given in Tables XX and XXI of Appendix. The figures indicate that there is a growing trend among the farmers to resort to agricultural co-operatives and co-operative banks for loans and advances for agricultural development.

The Central Co-operative Bank Ltd., Karnal.—There was no central co-operative credit society in the district prior to 1920. The co-operative societies were affiliated to the Ambala Central Co-operative Bank Ltd., Ambala City. The Karnal Central Co-operative Bank Ltd., was established at Karnal in 1920 with an authorised share capital of Rs. 1,00,000 and all these societies were affiliated to it.

The bank got firmly established during the first decade of its existence. In 1930, its working capital stood at Rs. 15.46 lakhs and paid-up share capital at Rs. 0.68 lakh; it owned funds to the extent of Rs. 0.73 lakh and deposits to the tune of Rs. 13.36 lakhs. An amount of Rs. 12.25 lakhs was advanced as loans to societies and the interest thereon amounted to Rs. 0.52 lakh. With these liabilities and assets, the Bank was considered as one of the best central credit institutions in the State. The bank could not make further headway for more than a decade due to the economic depression that continued up to 1941. However, during the post-Independence years the bank has made rapid strides towards recovery. It advanced loans to the tune of Rs. 207.32 lakhs during the year ending June 1968, and Rs. 421.44 lakhs during the year ending June 1969 (See Table XXII of Appendix). The bank has branches at Kaithal, Panipat, Thanesar, Shahabad (Shahbad), Ladwa and Nilu Kheri (Nilo Kheri).

The Primary Land Mortgage Bank Ltd., Karnal.—Since long-term finance was not provided to the farmer by the co-operative credit structure, the Punjab State Co-operative Land Mortgage Bank Ltd., Jullundur (later shifted to Chandigarh in August 1962) was established on February 26, 1958. Its main objective has been agricultural development. Long-term loans are advanced by it for productive purposes against mortgage of land. Till 1962, the Bank operated through the Karnal Central Co-operative Bank Ltd., which charged $\frac{1}{2}$ per cent commission on the loans disbursed through it. In that year, the Primary Land Mortgage Bank Ltd. was opened at Karnal. The membership and the share capital of the members belonging to the Karnal district were transferred from the Punjab State Co-operative Land Mortgage Bank Ltd. to the Primary Land Mortgage Bank Ltd., Karnal. Other five Primary Land Mortgage Banks are located at Kaithal (1), Panipat (2) and Thanesar (2). The total membership of all the six banks in 1969 was 10,443 and the long-term loans advanced amounted to Rs. 265.08 lakhs.

JOINT STOCK BANKS

The district has seven banks, each with its branch offices at various places in the district. These banks carry on the normal banking activities including deposits, remittances and advances against Government securities and other goods. The State Bank of India has one branch each at Kaithal, Karnal and Nilu Kheri (Nilo Kheri) and two branches each at Panipat and Thanesar. All Government transactions are handled by it as the local agent of the Reserve Bank of India. The State Bank of Patiala, a subsidiary of the State Bank of India, has its branches at Gharaunda and Samalkha. The Central Bank of India has branches at Kaithal, Karnal, Ladwa, Madlauda, Panipat, Pehowa, Pundri and Tirawari (Taraori). The Punjab National Bank has its branches at Kaithal, Karnal, Panipat, Samalkha and Shahabad (Shahbad). There are two offices of the Punjab National Bank at Karnal. The other three banks are : The Punjab and Sind Bank Ltd., The Lakshmi Commercial Bank Ltd. and The New Bank of India Ltd. with their offices at Karnal, Radaur and Karnal respectively. The list of branches of the joint stock banks in the district is given in Table XXIII of Appendix. In view of the re-oriented lending policy in favour of agriculturists, many of these banks embarked upon a programme of extending direct financial assistance to progressive farmers to supplement the role of co-operatives. Loans are advanced for various purposes in the nature of short term crop loans for the purchase of inputs and instalment credit/medium term requirements for development of land, purchase of agricultural machinery, provision of irrigation facilities and for the purchase of pumping sets, electric motors, oil engines, tractors, etc.

INSURANCE

Prior to 1956, there were agencies of various private insurance companies which covered life risk besides marine, fire, motor accidents and miscellaneous accident risks. But with the nationalisation of life insurance in 1956, only general business remained in the private sector. In 1967—70, the companies working in the district for fire, marine, motor accidents and miscellaneous accidents business were : the New India General Insurance Company Ltd., the Jai Bharat Insurance Company Ltd., the Ruby General Insurance Company Ltd., the Northern India Motor Owners Insurance Company Ltd., the Vanguard Insurance Company Ltd. and the Hindustan General Insurance Company Ltd. The Life Insurance Corporation also entered the field of general insurance in 1964.

Life Insurance.—The Life Insurance Corporation (L.I.C.) took up the life insurance business in 1956 and established its office at Karnal in September the same year. The jurisdiction of this branch office extended to the Karnal tahsil. A Development Centre at Kaithal was opened in 1961 and it covered the Kaithal tahsil. The same year a sub-office was opened at Panipat with its jurisdiction over the Panipat tahsil of the Karnal district and the Jind and Narwana tahsils (comprising the present Jind district). In 1962, the sub-office at Panipat was upgraded as branch office and another Development Centre covering the Thanesar tahsil was opened at Thanesar. In 1967—70, the L. I. C. with its two branch offices at Karnal and Panipat and two Development Centres at Thanesar and Kaithal, 41 Development Officers and 498 agents on roll (of whom 452 were working actively), was well equipped to carry the message of Life Insurance to the remotest parts of the district. The business secured by the L.I.C. in the district during 1964-65 to 1969-70 is given below :

Year	Life Insurance		General Insurance	
	Number of policies	Sum assured (Rs. in lakhs)	Number of cases	Premium income (Rs.)
1964-65	4,233	206.09	137	8,508
1965-66	4,505	229.36	301	20,890
1966-67	3,776	213.75	405	31,406
1967-68	4,170	268.54	509	35,089
1968-69	4,220	308.37	719	58,392
1969-70	3,991	329.32	845	64,968

SMALL SAVINGS

Various schemes like Post Office Savings Bank, Cumulative Time Deposits, 12-year National Defence Certificates, 10-year Defence Deposits Certificates, 15-year Annuity Certificates, 10-year National Savings Certificates, 5-year Fixed Deposits and Public Provident Fund were introduced all over the country to inculcate the habit of saving among the people and to mobilise resources for a developing economy. The Karnal district has made a worth while contribution in this field.

The large number of post offices scattered all over the district mobilise middle class savings in rural as well as urban areas. Banking facilities are virtually extended to everybody's door-step through Post Office Savings Banks. In 1967, there were 319 post offices out of 332 in the district doing savings bank business. These included a head post office at Karnal, 46 sub-offices and 272 branch offices. The following table giving the number of savings bank accounts and the total amount invested during 1963-64 to 1969-70 shows the rapid progress made in mobilising small savings :—

Year	Number of savings bank accounts opened	Progressive number of savings bank accounts	Deposits during the year	Progressive total
			(Rs.)	(Rs.)
1963-64	4,984	49,701	1,34,73,938	3,21,26,801
1964-65	5,745	53,421	1,53,23,161	3,35,85,594
1965-66	7,110	56,305	1,90,28,304	3,85,43,610
1966-67	17,279	69,119	2,11,46,340	4,16,04,611
1967-68	9,455	78,208	2,65,06,317	4,64,90,364
1968-69	8,176	84,411	3,12,98,233	5,25,41,687
1969-70	12,092	93,891	5,90,99,568	7,61,62,998

Collections under Small Saving Schemes during 1963-64 to 1969-70, as given below, show an appreciable increase in gross collections. The fall in net collections is explained by withdrawals :

Year	Total gross collections	Total net collections
	(Rs.)	(Rs.)
1963-64	1,77,29,568	20,14,173
1964-65	2,00,47,441	29,61,113
1965-66	2,34,91,713	30,55,705
1966-67	2,54,71,621	18,15,390
1967-68	3,35,12,728	56,32,403
1968-69	3,72,22,931	51,16,706
1969-70	6,73,17,000	2,47,36,000

CURRENCY AND COINAGE

People, particularly in rural areas, had some misgivings in the beginning about the utility of decimal coinage introduced in 1957. Conversion tables were placed at all the places of money transactions in order to make things easy for the people. Conversion factors have been given in Table XXIV of Appendix. The prefix 'naya' from the designation 'naya paisa' was dropped on June 1, 1964.

TRADE AND COMMERCE

There are no statistics available about the general trade of the district. Hence it is not possible to give anything like a complete view of the trade. In the beginning of the 19th century trade north and south of this area went on chiefly *via* Hansi-Hisar (Hissar). Only salt passed from Jhajjar (Rohtak district) through Karnal to the Punjab in great quantities. The course of trade entirely changed with the construction of Delhi-Ambala railway and improvement of the Grand Trunk Road. The mass of trade shifted to these arteries. The only important traffic west to east flowed to Shamli (Uttar Pradesh); the carts generally carried salt, *bajra*, *moth*, oil-seeds and ghee, and brought back *gur*.

Before the opening of the Firozpur-Delhi Railway, a large quantity of gram and *moth* from Budhlada, Patiala and Firozpur (Punjab) passed through Kaithal. In good season, the surplus gram of Kaithal was sent to Delhi through Panipat. Besides, *jowar*, *sarson*, *til* and *moong* were sent from this district to the outside markets. *Bajra*, a favourite food of Kaithal peasants, was largely consumed locally.

The local trade was principally conducted through the village dealers who dealt with the bigger traders at the *mandis* of Kaithal, Karnal and Panipat. A considerable traffic was also carried on by the cultivators themselves, especially by the Jats of Rohtak. In summer when their bullocks were otherwise idle, they plied their carts on hire. Delhi traders often sent their agents for purchasing cotton or ghee from the villages. This local traffic was of immense advantage to the farmers who could deal directly with the traders or their agents thus eliminating the agency of the middlemen, the local dealers, and thus always got a good price for their produce.

As for imports, oil and oil-seeds came from the northern districts of the Punjab; timber from Ambala; iron and piece-goods from Delhi; and salt from Bhiwani, Delhi or Ambala. Petty articles needed by the people and not produced in the villages were supplied by small hawkers, who bought

them from the cities and travelled about the villages exchanging them for grain.

Soon after the Partition the district was exporting principal agricultural commodities, such as rice, gram, wheat and live-stock. In consequence of changes which have occurred in the industrial structure since then, industrial products especially those of light engineering industry, wool and woollen cloth and the handloom products are also being exported in sizeable quantities. Bed-spreads, furnishing fabrics, woollen cloth and handloom products, specially those of Panipat, are well known all over India for their exquisite designs. Their export to the foreign countries is also undertaken under the Export Promotion Programme.

The district is surplus in rice and wheat and is on the top in the State for their production and procurement as is evident from the following figures for the years 1966-67 to 1969-70 :—

Year	(In metric tonnes)			
	Wheat		Rice	
	Procured in the State	Procured in the Karnal district	Procured in the State	Procured in the Karnal district
1966-67	8,616	3,480	88,594	65,367
1967-68	49,428	21,179	1,68,424	1,21,554
1968-69	2,03,394	79,284	1,59,549	1,09,709
1969-70	2,70,756	1,41,317	2,34,016	1,55,594

REGULATED MARKETS

The Punjab Agricultural Produce Markets Act, 1961, provides for the establishment of markets for agricultural produce in the State and for better regulation of its sale and purchase. Each village of the district has been attached to one market or another and the Act is applicable to the whole of the area where transactions, delivery and weighment are done. Each market committee has a principal market yard. In addition, there are sub-market yards in the town itself or in adjacent villages. Some of the sub-market yards are occasionally set apart for certain commodities to facilitate proper working.

There are 12 regulated markets in the Karnal district. Each of these has a market committee comprising members representing whole of the area. A list of the regulated markets along with their sub-market yards, number of villages covered and the date of regulation is given below. The main arrivals in each of the regulated markets are also indicated :

Serial Number	Regulated market	Sub-market yard	Number of villages covered	Year in which regulated	Main arrivals
1	2	3	4	5	6
1	Panipat	(i) Gandhi Mandi (ii) Gaushala Mandi (iii) City Grain Market (iv) Nehru Sabzi Mandi (v) Wool Market (vi) Onion Tibbies (vii) Chillies Tibbies	98	1941	Wheat, gram, maize, paddy, cotton, potatoes, onions, wool, <i>gur</i> and <i>shakkar</i> and chillies.
2	Shahabad (Shahbad)	(i) Sabzi Mandi Shahabad (Shahbad) (ii) Jhansa	126	1950	Wheat, maize, gram, <i>bajra</i> , paddy, cotton, <i>sarson</i> , <i>toria</i> , groundnut, <i>shakkar</i> and <i>gur</i> , barley, potatoes, onions and chillies
3	Kaithal	—	161	1941	Wheat, gram, barley, paddy, cotton and <i>toria</i>
4	Ladwa	(i) Radaur (ii) Indri	271	1962	Wheat, gram, maize, paddy, <i>masur</i> , barley, potatoes and onions
5	Madlauda	—	40	1950	Wheat, maize, gram, paddy, barley, <i>gur</i> , <i>shakkar</i> , cotton seed, <i>jowar</i> and <i>bajra</i>
6	Thanesar	(i) Kurukshetra Subhash Mandi (ii) Jawahar Ganj Mandi, Pipli (iii) Thanesar Sabzi Mandi	90	1957	Paddy, wheat, gram, maize, <i>toria</i> , <i>sarson</i> , <i>jowar</i> , and <i>bajra</i> , <i>gur</i> and <i>shakkar</i>
7	Tirawari (Taraori)	(i) Subhash Mandi, Tirawari (Taraori) (ii) Main Bazar, Tirawari (Taraori) (iii) New Market, Tirawari (Taraori) (iv) Nilu Kheri (Nilo Kheri) (v) Raipur Koran (vi) Nigdhu	133	1955	Paddy, wheat, <i>masur</i> , maize, potatoes, gram and onions

Serial Number	Regulated market	Sub-market yard	Number of villages covered	Year in which regulated	Main arrivals
1	2	3	4	5	6
8	Charaunda	Mandi Mani Ram	63	1948	Wheat, barely, maize, <i>jowar</i> , <i>bajra</i> , paddy, gram, <i>toria</i> , <i>sarson</i> , cotton, cotton seed, potatoes, onions, <i>gur</i> and <i>shakkar</i>
9	Karnal	(i) Purani Mandi (ii) Sabzi Mandi (iii) Kunjpura (iv) Nisang (v) Jundla	146	1941	Paddy, potatoes, wheat, <i>gur</i> , gram, <i>toria</i> , maize and cotton
10	Samalkha	—	57	1950	Wheat, paddy, <i>gur</i> , <i>shakkar</i> , <i>khandsari</i> , gram, maize, <i>bajra</i> , cotton, and cotton seed
11	Pundri-Fatehpur	—	103	1955	Wheat, gram, barley, maize, <i>masur</i> , <i>toria</i> , paddy, cotton, <i>gur</i> and <i>shakkar</i>
12	Pehowa	Ismailabad	95	1966	Wheat, gram, paddy, <i>masur</i> , barley, maize and <i>toria</i>

The usual course of trade in the district is through *mandis* where business is transacted daily. The produce is handled in large quantities and specialised operators perform different services. The sellers receive prompt payment of the sale proceeds from the commission agents in cash or by *hundis*. These *mandis* serve as assembling points for local produce or produce received from distant markets. Storage facilities are available. From these *mandis*, the goods are despatched to other markets by the traders.

Uniform market rates for all operations connected with the sale of goods have been prescribed in all the 12 market committees. These comprise five paise per hundred rupees for auction, four paise per unit for filling, two paise per unit for sewing, Rs. 1.50 per hundred rupees as commission charges and 16 paise per hundred rupees as brokerage.

FAIRS

Fairs of the district are chiefly of religious character and none of them has any commercial importance. A few of them are of all-India importance, and attract people from neighbouring districts and other parts of the country. The description of important fairs like Phalgu Fair, Pharal; Chet Chaudas Fair, Pehowa; and Solar Eclipse and Lunar Eclipse Fairs, Kurukshetra may be seen in the Chapter on 'People'.

Cattle fairs are, however, held at various places in the district and are organised by the respective Panchayat Samitis and Municipal Committees.¹ Most of the cattle dealers who attend these fairs are professional and visit one cattle fair after another. In any case cattle fairs provide facilities to the agriculturists to purchase and sell cattle. The Panchayat Samitis levy cess at the rate of 3 paise per rupee on the sale price of the cattle. Besides, an entry fee of 25 paise per cattle is also charged. The fairs held by the Panchayat Samitis are :

Place where the cattle fair is held	Periodicity
Karnal	Monthly
Radaur	Monthly
Shahabad (Shahbad)	Monthly
Samalkha	Monthly
Panipat	Monthly

1. The control and management of the cattle fairs has been taken over by the Government (in the Development and Panchayat Department) since November 24, 1970.

Place where the cattle fair is held	Periodicity
Nilu Kheri (Nilo Kheri)	Monthly
Ladwa	Yearly, in July
Israna	Six-monthly, in March and September

The Shahabad (Shahbad) fair is held jointly by the Panchayat Samiti and the Municipal Committee. The cattle fairs at Ladwa and Pehowa are organised by the Municipal Committees through contractors.

CO-OPERATION IN TRADE

There is a District Wholesale Co-operative Supply and Marketing Society at Karnal which conducts wholesale business in Government supplies, viz. agricultural seeds, sugar, oils, fertilizers, insecticides and agricultural implements. Besides, there are 16 co-operative marketing and marketing-cum-processing societies in the district as given below :

- (1) The Karnal Co-operative Marketing-cum-Processing Society Ltd.
- (2) The Karnal Haryana Co-operative Marketing-cum-Processing Society Ltd.
- (3) The Gharaunda Co-operative Marketing-cum-Processing Society Ltd.
- (4) The Taraori Co-operative Marketing-cum-Processing Society Ltd.
- (5) The Panipat Co-operative Marketing-cum-Processing Society Ltd.
- (6) The Samalkha Co-operative Marketing-cum-Processing Society Ltd.
- (7) The New Samalkha Co-operative Marketing-cum-Processing Society Ltd.
- (8) The Madlauda Co-operative Marketing-cum-Processing Society Ltd.
- (9) The Kaithal Co-operative Marketing Society Ltd.

- (10) The Pundri Co-operative Marketing Society Ltd.
- (11) The Thanesar Co-operative Marketing Society Ltd.
- (12) The Shahbad Co-operative Marketing Society Ltd.
- (13) The Ladwa Co-operative Marketing Society Ltd.
- (14) The Pehowa Co-operative Marketing Society Ltd.
- (15) Assandh Co-operative Marketing Society Ltd.
- (16) Pehowa Saraswati Co-operative Marketing Society Ltd.

The membership of co-operative marketing societies consists of primary societies and individual members. In addition to the marketing of agricultural produce, the supply and distribution of fertilizers, seeds, etc., is also undertaken by the societies.

CONSUMER CO-OPERATIVE STORES

Three central co-operative stores were opened in 1963, one each at Karnal, Panipat and Kurukshetra, under a scheme sponsored by the Government of India. These were opened to ensure constant distribution of consumer goods (controlled as well as non-controlled) and to check the rising trend of prices. By 1968-69, the central co-operative stores had 16 branches in different parts of the district. These perform an important function by making available to the consumers their daily requirements at reasonable rates. The stores covered 8,152 families and their sale during the year ending June 1969 was worth Rs. 25.20 lakhs.

STATE TRADING

Fluctuation in the prices of foodgrains necessitated the adoption of State trading in wheat and other essential commodities. This helped to maintain a price level which was fair both to the producers and to the consumers. The extent of procurement basically depended on the extent of production.

For the purpose of distribution of foodgrains and other essential commodities, the Government started a network of fair price shops in urban and rural areas. There were 324 such shops scattered all over the district in 1968, 311 in 1969 and 297 in 1970.

STORAGE AND WAREHOUSING

The villagers store their agricultural produce in houses and *kothas* (bins). In markets, the commission agents and co-operative marketing

societies maintain godowns. The mills and factories maintain godowns in their own premises to stock the requisite raw material.

The godowns maintained by private dealers and co-operative marketing societies are not of the desired specifications. Since there was no organised storage of grains, the Agricultural Produce (Development and Warehousing Corporations) Act, 1956, was passed. It was replaced by the Warehousing Act, 1962, under which a Warehousing Corporation was established. The Corporation was authorised to acquire and build godowns and run warehouses for the storage of agricultural produce. Accordingly, warehouses were opened at Kaithal, Pehowa, Thanesar, Tirawari (Taraori), Shahabad (Shahbad), Panipat and Gharaunda. Except at Kaithal, Pehowa and Thanesar, all were in the hired godowns. These have reduced the loss of grain occurring through rats and insects.

Bins and cold storages are also opened in the private sector for storing agricultural and other goods. Some of the well known cold storages are : Janta Cold Storage, Panipat; Co-operative Cold Storage, Panipat; Raghbir Cold Storage, Karnal; Delhi Cold Storage, Karnal; Dewan Cold Storage, Karnal; Karnal Cold Storage, Karnal; Zamindara Cold Storage, Shahabad (Shahbad); Markanda Cold Storage, Shahabad (Shahbad); Saraswati Cold Storage, Shahabad (Shahbad) and Madhuban Cold Store, Kutail.

WEIGHTS AND MEASURES

During the 19th century, the weights and measures of the district were divided into *kachcha* and *pukka*; the latter were the standard measures in which Government returns and records were prepared, and the former were the measures used by the people in their daily life. The villagers living in the vicinity of the towns often used *pukka* weights and measures; towards the Rohtak border they always used *pukka* weights and *kachcha* measures; in the rest of the tract, both the weights and measures were always *kachcha*. But prices were always quoted in *pukka* weights. There were other weights such as a *gahra* (as much as can be carried under the arm) and *bhar* (as much as can be carried on the head); and the other measures of length such as *ungli* (the finger breadth), the *mutthi* (the closed fist) the *balisht* (the span), the *hath* (elbow to finger tips) and the *kadam* (the double pace). There were no real measures of capacity, grains and liquids being sold by weight. A pinch of anything was called *chugti*; a closed handful; *mutthi*; and the contents of the two hands put open side by side, *anjla*.

The metric weights and measures, under the Punjab Weights and Measures (Enforcement) Act, 1958, were introduced in the district in 1961. To obviate hardship to the public, a transitory period of two years was allowed permitting the use of weights and measures which were in vogue immediately before the enforcement of the Act. The old weights and measures are still known but are no longer in vogue. The conversion factors are given in Table XXIV of Appendix.

The Inspector, Weights and Measures with his headquarters at Karnal, verifies weights and scales, etc., used in trade. He enforces the use of standard and authorised weights and scales.



Chapter VII

COMMUNICATIONS

INTRODUCTION

Karnal, from the very beginning, has been on the high-road to Delhi, the capital of India. Sher Shah Suri recognising the advantages of improved means of communication constructed a road from the coast of Bengal to his great fort at Rohtas, north of Jhelum, in 1543. This road was later improved upon by the Mughal Emperors who constructed spacious serais with bricks and stones 8 *kos* apart and 20—30 feet high *kos minars* 2½ miles apart. The *kos minars* extant at a number of places in the district and the gateway at Gharaunda mark the route of the old royal road. During the rule of the British East India Company, Karnal was the frontier post to keep a watch on the Sikh States and some of the roads built by the British converged here.

By the close of the 19th century, the Grand Trunk Road was the only metalled road passing through the district. However, the following network of unmetalled roads connected important localities with one another internally :—

Karnal-Kaithal, Panipat-Kaithal, Kaithal-Patiala, Karnal-Hansi, Panipat-Rohtak, Panipat-Alupur, Karnal-Jagadhri, Indri-Thanesar, Indri-Butana, Rajaund-Pundri, Munak-Pundri, Nisang-Munak, Alupur-Naultha, Kaithal-Pehowa, Kaithal-Thanesar, Kaithal-Jind, Kaithal-Saharanpur, Pehowa-Thanesar, Karnal-Asandh, Karnal-Meerut, Karnal-Firozpur, Panipat-Sanauli, Panipat-Safidon, Panipat-Nisang and Indri-Chauganwa.

The Delhi-Ambala Railway passing through the heart of the district was opened in 1892. Narwana-Kaithal Branch Railway line was constructed in 1899, and was extended to Kurukshetra in 1910.¹ With the opening of the railways designed to have the maximum opportunities for earning revenues, the road development was neglected. The advent of motor transport after World War I, however, redressed this imbalance. Many feeder roads and highways were constructed to connect the interior of the district with the railway

1. Entirely in the Kurukshetra district since January 23, 1973.

stations. Likewise, roads were also constructed up to the Yamuna which had ferry service at Beggi, Kalsaura, Dabkauli, Mirghan, Sanauli, Khojgi-pur, Barsat, Gumthala Rao, Goela Khurd and Bardul.

Communications made a fair progress during and after the War. In 1916, another branch railway line was opened to connect Panipat and Jind. Simultaneously metalled roads were constructed to connect Kaithal-Karnal, Pehowa-Thanesar, Thanesar-Ladwa and Karnal-Indri. Panipat-Gohana-Rohtak Railway was opened in 1930 but was closed in 1942 because it was uneconomic. The portion¹ between Rohtak and Gohana was revived in 1959.

After Independence, greater emphasis was laid on the development of communications and a large number of roads were constructed. In 1972, the district had a network of metalled and unmetalled roads and 3 railway lines.

ROADS AND ROAD TRANSPORT

ROADS

At the time of Independence in 1947, the areas now comprising Haryana State claimed only 1,895 kilometres of metalled roads. Of this, the Karnal district had only 304 kilometres. The post-Independence period has seen a considerable expansion in road construction. The phased progress of road development achieved in the Karnal district during the First, Second and Third Five-Year Plans along with the position as obtaining on March 31, 1970, is exhibited in the table below :

Period	Total metalled length	Length per 100 square kilometres of area	Length per lakh of popu- lation
	(kilometres)	(kilometres)	(kilometres)
At the time of Independence (1947)	304	3.83	20.26
First Five-Year Plan (1951—56)	381	4.80	25.48
Second Five-Year Plan (1956—61)	698	8.80	46.83
Third Five-Year Plan (1961—66)	806	10.16	54.08
As on March 31, 1970	975	12.19	65.42

1. Partly in the Rohtak district and partly in the Sonapat (Sonepat) district since December 22, 1972.

The above table depicts the progressive increase of metalled roads in the Karnal district which was more than trebled by March 31, 1970. The road length when examined on area basis shows that in March 1967, the Haryana State had about 19 kilometres per 100 square kilometres of area as against 26 kilometres in the country.¹ This length in relation to the Karnal district which was 3.83 kilometres per 100 square kilometres of area in 1947 increased to 10.16 kilometres in 1966 and 12.19 kilometres in March 1970.

This district then ranked fourth in the State in respect of road length; Hisar (Hissar), Gurgaon and Rohtak being first, second and third respectively. The roads have been classified on the national pattern as national highways, state highways, district major and minor roads and village roads. The Haryana Public Works Department maintained the national highways, state highways and district major roads. The district minor roads and village roads were the responsibility of Zila Parishad² which transferred many of these to the Public Works Department due to the paucity of funds.

The roads maintained by the Haryana Public Works Department in the district in March 1970 are given in Table XXV of Appendix. A brief description of the more important roads³ is given below :

NATIONAL HIGHWAYS

Grand Trunk Road (N.H.1).—This is the oldest road passing through the district. The road enters the district from Delhi side at 66 kilometre, traverses and leaves it at 191 kilometre. It runs along the Delhi-Ambala Railway line and passes through Samalkha, Panipat, Gharaunda, Karnal, Nilu Kheri (Nilo Kheri), Pipli and Shahabad (Shahbad). The road is metalled, bitumen-surfaced and has double lane width of 22 feet.

STATE HIGHWAYS

Kala Amb, Ambala, Pehowa, Kaithal, Narwana, Fatehbad Road (S.H.2).—After traversing the Ambala district, this road enters the Karnal district. It goes to Pehowa and passing through Kaithal leaves the district away from Kaithal towards Narwana (Jind district). The whole length of the road in the district is metalled and bitumen-surfaced.

1. *Techno-Economic Survey of Haryana, 1970*, published by National Council of Applied Economic Research, New Delhi, p. 120.

2. The Zila Parishad has been abolished since June 13, 1973, and all the roads have been taken over by the Public Works Department.

3. Some of these roads now pass entirely through the Kurukshetra district.

Kala Amb, Sadhaura, Shahabad (Shahbad), Thol Road (S.H. 4).—The total length of the road is 26.34 kilometres. Of this, 18.83 kilometres had been metalled and bitumen-surfaced while the work on remaining 7.51 kilometres was in progress. It passes through Shahabad (Shahbad) and after crossing Grand Trunk Road (N.H. 1) joins Thanesar, Jhansa, Thol road which is a district major road.

Saharanpur, Radaur, Pipli, Pehowa, Chika Road (S.H. 6).—The road starting from Saharanpur, enters the district at 45.06 kilometre and goes up to Chika *via* Ladwa, Pipli. Kurukshetra and Pehowa. Chika is also connected with Patiala by State Highway No. 11, *i.e.* Meerut, Sonipat (Sonepat), Gohana, Asandh, Kaithal, Patiala Road.

Kunjapura, Karnal, Kaithal, Khanauri Road (S.H. 8).—The road starting from Kunjpura runs within the district and connects Karnal with Kaithal and goes up to Khanauri about 13.71 kilometres away from Kaithal. The total length of 85.32 kilometres is metalled and bitumen-surfaced. This road serves as a link road between Grand Trunk Road (N.H. 1) and Meerut, Sonipat, Gohana, Asandh, Kaithal, Patiala Road (S.H. 11).

Karnal, Asandh, Jind, Hansi, Tosham, Sodhi Road (S.H.12).—The road from Karnal to Asandh 36.80 kilometres long is metalled and bitumen-surfaced. The section from Asandh to Jind (26.27 kilometres) has also been metalled and it lies in the Karnal district.

Panipat, Safidon, Jind, Bhiwani, Loharu Road (S.H. 14).—The length of this road from Panipat to the district boundary is 22.89 kilometres which is all metalled and bitumen-surfaced.

Muzaffarnagar, Sanauli, Panipat, Gohana, Rohtak, Bhiwani Road (S.H. 16).—This road enters the district after crossing the Yamuna over a newly constructed bridge at Sanauli. It goes to Rohtak after passing through Panipat. The whole stretch of 42.61 kilometres of this road lying in the Karnal district is metalled and bitumen-surfaced.

Karnal, Ladwa, Shahabad (Shahbad) Road (S.H. 7).—The road starts from Karnal and reaches Shahabad (Shahbad) *via* Ladwa. Total length of this road is 57.31 kilometres, out of which 48.33 kilometres had been metalled and bitumen-surfaced while 8.98 kilometres was under construction.

Karnal, Kachhwa, Pehowa, Patiala Road (S.H. 9).—The road starts from Karnal and leads to Patiala after passing through Kachhwa, Dhand

and Pehowa. Total length of this road is 59.14 kilometres out of which 25.54 kilometres had been metalled and bitumen-surfaced while 33.60 kilometres was under construction.

Meerut, Sonipat, Gohana, Asandh, Kaithal, Patiala Road (S.H. 11).— The road provides a short and direct route from Delhi and Meerut to Patiala via Sonipat (Sonepat), Gohana, Jogsi, Safidon, Asandh and Kaithal. It starts from Meerut and after passing through Sonipat (Sonepat), Gohana, and Jogsi enters the Karnal district at 15.18 kilometre and then passing through Safidon (Jind district) again enters the Karnal district and proceeds to Asandh which is 8.38 kilometres inside the district boundary. The road further proceeds to Rajaund, Kaithal and Gula (Guhla) via Chika. This stretch comprises 95.04 kilometres. Of this, 79.86 kilometres had been metalled and bitumen-surfaced while 15.18 kilometres was under construction.

The road from Chika goes to Tityana which is 5.41 kilometres, and is metalled and bitumen-surfaced. From Tityana this road goes to Patiala after crossing the newly constructed bridge over river Ghagghar. The length of the road from Tityana to the district boundary is 1.81 kilometres

DISTRICT MINOR ROADS

The district minor roads including the village roads were, as stated earlier, maintained by the Zila Parishad, Karnal. In 1970, the Zila Parishad maintained the following roads :—

Metalled roads	17 Miles and 3 Furlongs
Unmetalled roads	98 Miles
<i>Kachcha</i> roads	281 Miles

Such roads are maintained to connect villages with one another and with important roads and railway stations. Generally, vehicles with iron or wooden tyres ply on them with the result that ruts are formed which render them unserviceable after some time. These roads were usually below the level of the fields and got flooded during the rainy season. The level of such roads has been raised and converted into all weather roads.

In view of the stringency of funds with the Zila Parishad and the increasing importance of road transport, Government took over some important roads from the Zila Parishad and surfaced them with bitumen.

The metalled and unmetalled roads which were maintained by the Zila Parishad in March 1970, are given in Table XXVI of Appendix.

CANAL INSPECTION ROADS

There are well maintained unmetalled inspection roads along the banks of the canals. These roads can serve only light vehicular traffic. These are maintained by the Irrigation Department and are not meant to be used by the general public.

ROAD TRANSPORT

Vehicles and conveyances.—In the days gone by, the usual means of conveyance were horses, bullock carts (occasionally camel carts), *raths* and *majholis*, but most people moved from one place to another on foot. They travelled only on rare occasions like paying visits to holy places, and that too in groups. Such visits took a long time to complete their inward and outward journeys. With the passage of time, villages and towns were linked by roads and consequently improved vehicles like rubber-tyred tongas and automobiles came to ply on the roads.

The different means of conveyance available in the district comprise *thelas* and carts, horses and donkeys, camel carts and country carts, tongas, cycles, rickshaws, motor-cycles and scooters, jeeps and station wagons, motor cars and buses, trucks, tractors and tempos.

The total number of registered vehicles in the district during 1962-63 to 1969-70 is given in Table XXXVII of Appendix. It indicates that there was an all-round increase in the number of vehicles. It was sharp in the case of trucks, buses, tractors and two wheelers. The increase in buses and trucks is indicative of the progress of road transport, passenger as well as goods. The progress toward mechanised farming led to increase in the number of tractors. In addition to the usual farming operations, these provide convenient transport for grain and fodder to the near-by markets. Two wheelers (scooters and motor-cycles), the maintenance of which suits the pockets of the middle class people, provide them mobility.

PASSENGER TRANSPORT

Up to March 31, 1970, the operation of passenger transport was shared between the Government and the private operators on 50 : 50 basis. The first scheme of nationalisation was effected on April 1, 1970 and it covered the two routes, viz. Ambala-Pehowa via Pipli and Ambala-Pehowa-Kaithal.¹

1. The cent per cent nationalisation has been completed in the Karnal district on November 30, 1972.

The transport undertakings, the strength of their bus fleet and the routes on which these operated, are detailed below :

Name of transport undertaking and strength of its bus fleet	Name of routes
1. The New Karnal Co-operative Transport Society Ltd., Karnal (21 buses)	Karnal-Delhi Karnal-Panipat Karnal-Hathwala (Hatwala) Karnal-Ladwa Karnal-Siwan Karnal-Kaithal Asandh-Pehowa Karnal-Safidon Rohtak-Panipat Panipat-Asandh <i>via</i> Salwan Panipat-Asandh <i>via</i> Safidon Panipat-Samalkha Samalkha-Delhi Pundri-Asandh Kaithal-Asandh
2. The Indian Motor Transport Company (Pvt.) Ltd., Karnal (32 buses)	Karnal-Karsa <i>via</i> Dhand Karnal-Pehowa Karnal-Kalesar Karnal-Kalesar <i>via</i> Chhachhrauli Panipat-Asandh Pipli-Thol <i>via</i> Jhansa Ladwa-Yamunanagar Karnal-Pehowa <i>via</i> Karsa Karnal-Sonipat (Sonepat) Karnal-Jagadhri Karnal-Radaur Karnal-Ladwa <i>via</i> Indri Thanesar-Bilaspur Karnal-Yamuna Bridge Pehowa-Asandh Karnal-Ladwa <i>via</i> Pipli Thanesar-Pehowa-Gula (Guhla) Pipli-Pehowa

Name of transport undertaking and strength of its bus fleet	Name of routes
3. The Karnal Delhi Co-operative Transport Society Ltd., Karnal (21 buses)	Panipat-Rohtak Delhi-Karnal Kaithal-Jind Karnal-Kaithal Karnal-Asandh Kaithal-Gula (Guhla) Karnal-Sonipat (Sonepat) Karnal-Hathwala (Hatwala) Kaithal-Delhi Karnal-Panipat
4. Karnal-Kaithal Co-operative Transport Society Ltd., Karnal (26 buses)	Kaithal-Sonipat (Sonepat) Karnal-Safidon Kaithal-Delhi Karnal-Salwan <i>via</i> Munak Bala Pada Kaithal-Jind Karnal-Kaithal Kaithal-Asandh <i>via</i> Pundri Kaithal-Pehowa Karnal-Safidon Sonipat (Sonepat)-Kaithal <i>via</i> Asandh
5. The Karnal Co-operative Transport Society Ltd., Karnal (22 buses)	Karnal-Delhi Karnal-Panipat Karnal-Ladwa Karnal-Baghana Karnal-Safidon Kaithal-Sonipat (Sonepat) <i>via</i> Asandh Rohtak-Panipat Patiala-Delhi
6. The Kaithal Naguran Co-operative Transport Society Ltd., Kaithal (2 buses)	Karnal-Habri <i>via</i> Pundri Kaithal-Habri <i>via</i> Pundri
7. The Dehati Janta Co-operative Transport Society Ltd., Karnal (2 buses)	Karnal-Habri <i>via</i> Pundri Kaithal-Habri <i>via</i> Pundri

Name of transport undertaking and strength of its bus fleet	Name of routes
8. The Karnal Tonga Drivers Co-operative Transport Society Ltd., Karnal (1 bus)	Karnal-Kunjapura
9. The Karnal General Labour Co-operative Transport Society Ltd., Karnal (3 buses)	Karnal-Salwan <i>via</i> Munak-Bala Panipat-Jind Narwana-Batta-Kaithal
10. The Haryana Co-operative Transport Ltd., Kaithal (9 buses)	Kaithal-Narwana Kaithal-Tohana Kaithal-Naguran Kaithal-Thanesar Kaithal-Gohana Kaithal-Jind Kaithal-Panipat
11. The Rawalpindi Victory Transport Company Pvt. Ltd., Ambala City (9 buses)	Ambala City-Pundri <i>via</i> Pehowa-Dhand Ambala-Pehowa
12. The Tourist Co-operative Transport Society Ltd., Ambala City (9 buses)	Ambala-Kaithal <i>via</i> Pehowa
13. The Sadhaura Transport Company (P) Ltd., Sadhaura (11 buses)	Shahabad (Shahbad)-Sadhaura Shahabad (Shahbad)-Barara Shahabad (Shahbad)-Yamunanagar <i>via</i> Barara Shahabad (Shahbad)-Barara-Nahan
14. (i) Haryana Roadways, Karnal (150 buses)	Karnal-Pehowa Karnal-Pathankot Karnal-Ladwa <i>via</i> Indri Karnal-Yamunanagar <i>via</i> Indri Karnal-Pehowa <i>via</i> Dhand Karnal-Nangal Karnal-Hardwar Karnal-Yamunanagar Karnal-Panipat Karnal-Gharaunda

Name of transport undertaking and
strength of its bus fleet

Name of routes

Karnal-Kaithal
 Karnal-Thol *via* Jhansa
 Karnal-Kalesar
 Karnal-Jind
 Karnal-Siwan
 Karnal-Kunjpora
 Karnal-Bela
 Karnal-Uglana
 Karnal-Kaithal *via* Baras
 Karnal-Kaithal-Gula (Guhla)
 Kaithal-Hardwar-Rishikesh
 Kaithal-Gula (Guhla)
 Kaithal-Delhi
 Ambala-Karnal
 Panipat-Sanauli
 Karnal-Panipat-Bapauli
 Panipat-Barsat
 Panipat-Jind
 Panipat-Asandh
 Ropar-Kaithal
 Thanesar-Pehowa
 Gula (Guhla)-Pehowa
 Ladwa-Jyotisar
 Karnal-Patiala
 Panipat-Nangal
 Karnal-Asandh
 Karnal-Chandigarh
 Pehowa-Delhi *via* Pipli
 Pehowa-Ranjitpura
 Kaithal-Asandh *via* Pundri
 Karnal-Meerut
 Karnal-Dehradun
 Panipat-Shamli
 Karnal-Muzaffarnagar
 Karnal-Pipli
 Karnal-Munak
 Karnal-Karsa-Dhand



Name of transport undertaking and strength of its bus fleet

Name of routes

	Karnal-Safidon Kaithal-Patiala <i>via</i> Chika Karnal-Sonipat (Sonepat) Kaithal-Sonipat (Sonepat) <i>via</i> Asandh Kaithal-Panipat <i>via</i> Asandh
(ii) Haryana Roadways, Ambala (100 buses)	Kalka-Pehowa-Kaithal Ambala-Kaithal <i>via</i> Pehowa Ambala-Karnal Ambala-Asandh Ambala-Asandh <i>via</i> Dhand Ambala-Shahabad (Shahbad) Ambala-Ismailabad Ambala Pehowa Ambala-Hathwala (Hatwala) Ambala-Pipli <i>via</i> Thol-Jhansa Ambala-Ladwa Ambala-Rajaund
(iii) Haryana Roadways, Rohtak (140 buses)	Kaithal-Sonipat (Sonepat) <i>via</i> Asandh- Panipat Rohtak-Kaithal <i>via</i> Sonipat (Sonepat) Rohtak-Panipat Gohana-Karnal Karnal-Yamunanagar Rohtak-Safidon <i>via</i> Jind-Asandh Karnal-Chandigarh Karnal-Sonipat
15. Universal Victory Bus Service (P) Ltd., Ambala City (12 buses)	Ambala-Pehowa <i>via</i> Pipli Ambala-Pehowa-Kaithal
16. Rohtak-Gohana Bus Service (P) Ltd., Rohtak (8 buses)	Rohtak-Panipat
17. Rohtak-Hissar Transport Co., Rohtak (5 buses)	Jind-Asandh
18. Rohtak-Hissar Transport Co. (P) Ltd., Rohtak (10 buses)	Asandh-Jind

(Nationali-
zed on
April 1,
1970)

Name of transport undertaking and strength of the bus fleet	Name of routes
19. Satnam Transport Co. (P) Ltd., Rohtak (17 buses)	Gohana-Panipat
20. Ithad Motor Transport (P) Ltd., Delhi (4 buses)	Delhi-Panipat <i>via</i> Sonipat (Sonepat)
21. Gian Bus Service Regd., Narwana (3 buses)	Narwana-Kailan-Kaithal
22. Rohtak Haryana Transporters (P) Ltd., Rohtak (28 buses)	Sonipat (Sonepat)-Kaithal <i>via</i> Asandh
23. Haryana Roadways, Chandigarh (80 buses)	Ambala-Karnal Ambala-Kaithal-Jind Karnal-Delhi Chandigarh-Karnal Chandigarh-Jind <i>via</i> Karnal Chandigarh-Panipat <i>via</i> Ambala- Kaithal-Pundri-Asandh Chandigarh-Bhiwani <i>via</i> Karnal- Panipat
24. Haryana Roadways, Gurgaon (180 buses)	Karnal-Jagadhri Delhi-Karnal Karnal-Jagadhri <i>via</i> Indri Ambala-Karnal Karnal-Sonipat (Sonepat) Sonipat (Sonepat)-Panipat Panipat-Karnal
25. Haryana Roadways, Hisar (Hissar) (60 buses)	Hisar (Hissar)-Karnal
26. Chandigarh Transport Under- taking, Chandigarh (6 buses)	Karnal-Delhi Ambala-Karnal
27. Punjab Roadways, Pathankot (2 buses)	Ambala-Karnal Karnal-Sonipat (Sonepat) Karnal-Panipat

Name of transport undertaking and strength of its bus fleet	Name of routes
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28. Punjab Roadways, Jullundur (2 buses)	Panipat-Delhi
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29. Punjab Roadways, Amritsar (2 buses)	Karnal-Delhi
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In addition to the above, a number of other routes, viz. Ambala-Jagadhri, Ambala-Hardwar, Ambala-Delhi, Ambala-Dehradun, Chandigarh-Rohtak *via* Gohana, Chandigarh-Rohtak *via* Sonipat (Sonepat), Chandigarh-Narnaul, Chandigarh-Rewari, Chandigarh-Hodal, Chandigarh-Delhi and Nangal-Delhi, pass through the district. The *de-luxe* bus service between Delhi and Chandigarh and Delhi and Patiala and an air-conditioned bus service between Delhi and Chandigarh pass through the district covering 124 kilometres on the Grand Trunk Road.

The following minimum and maximum rates of fares and freights for stage carriages as fixed by the Government were prevalent in the Karnal district :—

	Minimum rate per passenger per kilo- metre	Maximum rate per passenger per kilo- metre	Freight of personal luggage
	(Paise)	(Paise)	
For all metalled roads in the plains	1.9	2.6	Half the fare per kilometre per 40 kilo- grams
For all unmetalled roads in the plains	2.9	3.2	Ditto
For all metalled roads in hills ex- cluding Chakki-Dalhousie and Kalka-Simla routes	3.9	4.2	Ditto
Chakki-Dalhousie route	4.2	5.5	Ditto
Kalka-Simla route	3.9	5.2	Ditto
For all unmetalled roads in the hills	4.2	5.2	Ditto
For luxury coach being one class coach	Uniform rate of 3.6 paise		

There are no tramways or local bus service existing in any town of the district. However, station wagons and tempos which have been registered as taxis, provide links with various rural areas.

Goods transport by road.—The goods transport, handled mainly by private operators, has grown immensely. In 1969-70 there were 1,212 trucks registered in the district as against 85 in 1951. The reason for this phenomenal increase in the number of public carriers is that the rural sector which is actively participating in economic activities, relies much more on road traffic than on rail traffic.

In spite of the demand of goods traffic by road, this section is mostly unorganised. More than 90 per cent of the truck owners own less than four vehicles each. Nevertheless, there are two redeeming features. First, the system of booking agencies has developed which caters to the needs of both the operators and the traders. The operators are provided with parking, godown and warehouse facilities and the traders with a regular satisfactory service. Second, the private operators have organised themselves into unions at all important centres of trade and commerce to regulate the transport service and to eliminate unhealthy competition among themselves. As compared to the railways, the freight and incidental charges are less if the goods are transported by road. Consequently goods transport has sufficiently diverted to road, particularly on shorter haulage.

RAILWAYS

In 1970-71, there were three railway lines which served the district. These were of broad gauge, *i.e.* 5'—6" wide and were well maintained by the Northern Railway.

The line between Delhi and Ambala was opened for traffic in 1892. This line runs parallel to the Grand Trunk Road. From Delhi side after passing through the Rohtak¹ district, it enters the Karnal district and the first station falling thereon is Samalkha. It traverses the district through Diwana, Panipat, Babarpur, Gharaunda, Bazida Jatan, Karnal, Bhaini Khurd, Tirawari (Taraori), Amin, Kurukshetra, Dhirpur, Shahabad Markanda and Mohri and covers about 116 kilometres between Railway Station Samalkha and Mohri. The second railway line² is Narwana-Kurukshetra Branch. The line from Narwana to Kaithal was completed in 1899 and was extended to Kurukshetra in 1910. The Panipat-Jind railway was opened in 1916.

1. Sonipat (Sonepat) district since December 22, 1972.

2. Now running entirely in the Kurukshetra district.

Table XXVIII of Appendix shows the monthly average (1968-69) of inward and outward traffic of goods and passengers.

RAIL ROAD COMPETITION

The development of the railways gave a set-back to roads during the latter half of the 19th century. But the advent of the motor transport in the teens of the present century led to the development of feeder roads and highways. During the World War II, there was practically no rail-road competition due partly to a large number of motor vehicles having been requisitioned by the Government for military purposes and partly to petrol rationing. The railways had traffic far in excess of their capacity. After the cessation of War, the reversal of this advantageous position led to the adoption of a rigid code of principles and practices for regulating motor vehicles which aimed at protecting the financial interests of government in railway traffic.

After Independence, the Government thought of nationalizing the road transport. However, it reached an agreement with private enterprise by which the relative interest of the Government and private operators were clearly enunciated. The Government is also trying to achieve full co-ordination between rail and road traffic.

As revealed by a sample study of the traffic flow,¹ there is a good deal of road traffic. Though the actual ratio of the rail and road traffic is not known, the preference is clearly for road. This is more pronounced in short haulage. The reasons for the diversion of traffic to road seem to be lower freight rates, proper supervision, absence of irksome formalities and door-to-door service.

For the transport of heavy machinery, bulky articles and for long distance haulage (beyond 500 km.), there is a marked preference for railways.

WATERWAYS, FERRIES AND BRIDGES

There are only two rivers, the Yamuna and the Ghagghar² on which ferries are maintained. The Yamuna runs parallel to the eastern border of the district and separates it from Uttar Pradesh. The ferries are maintained to connect the district with Saharanpur, Meerut and Muzaffarnagar districts

1. *Techno-Economic Survey of Punjab*, National Council of Applied Economic Research, New Delhi, 1962, p. 71.

2. Now flows entirely in the Kurukshetra district.

of Uttar Pradesh at the following places :—

Tahsil	Name of the ferry	Number of boats	Number of crew	Name of place in Uttar Pradesh connected with the ferry
	Beggi (Uttar Pradesh)	2	10	
Karnal	Kalsaura	2	10	Gango
Karnal	Barsat	2	10	Kirtu
Karnal	Dabkauli	2	10	Lakhnauti
Thanesar	Gumthala Rao	2	10	Nakur
Karnal	Mirgahan	2	10	Manglora
Panipat	Sanauli	2	10	Ramra
Panipat	Khojgipur	2	10	Chaprauli
Panipat	Goela Khurd	2	10	Tanda
Karnal	Barana	2	10	Garhi

These ferries transport a large quantity of *gur* and *khandsari* from Uttar Pradesh. There is also a large traffic of donkeys at the time of donkey fair held at Bir Barauli in the Meerut district (Uttar Pradesh).

The four ferries on Ghagghar river are seasonal. These connect this district¹ with the Patiala district (Punjab) and provide the shortest route to different villages during the rainy season. These are maintained at the following places by the Panchayat Samitis concerned and are annually leased out to contractors :—

Name of the ferry	Number of boats	Number of crew
Dhandhauta	1	5
Tityana	1	5
Bhuslan	1	5
Usmanpur	1	5

1. Now in the Kurukshetra district.

All the major roads wherever they pass over the streams, drains, canals or their distributaries, have bridges. The Grand Trunk Road once passed over the oldest bridge which is known as old Mughal Bridge (*Badshahi pul*).¹ It was constructed during the reign of Shah Jahan and is a fine example of excellent masonry work of those days. This bridge ceased to be of 'national importance' from January 1, 1968, but has since then been deemed to be 'protected monument' under the Punjab Ancient and Historical Monuments and Archaeological Sites and Remains Act, 1964.

CIVIL AVIATION

The Department of Civil Aviation, which came into being in 1962, is the result of Government's desire to make the people of the State air-minded. The only flying club at Hisar (Hissar), started in 1965, had a shaky existence. As soon as the new State of Haryana was created, vigorous efforts were made to stabilize the old flying club at Hisar. A new club was started at Karnal in 1967. It is known as No. 2 Haryana Air Squadron N.C.C., Karnal.

The civil aviation in the district is looked after by the Karnal Aviation Club, Karnal. The Deputy Commissioner acts as the President of this Club while the Sub-Divisional Magistrate/General Assistant to the Deputy Commissioner is the Honorary Secretary. Its Managing Committee comprises the elite of the district. Its meetings are presided over by the Deputy Commissioner as its Chairman. The overall technical control, however, vests in the Adviser, Civil Aviation, Haryana. The technical staff, among others, includes a Chief Flying Instructor, a Chief Engineer and an Assistant Pilot Instructor.

As no government land was available at Karnal, a plot of about 100 acres of private land was acquired in 1967 at Karnal-Kunjpura road quite close to the town for the construction of an aerodrome. Flying was started the same year with modest amenities. The performance was encouraging with 1,100 hours of flying in the very first year which is the highest record of flying training ever done by any aviation club during the first year of its commissioning. In the following year, i.e. 1968-69, 1,400 hours of flying was done against the target of 1,000 hours fixed by the Government of India. The Club created yet another record of 1,800 hours of flying in 1970-71 against a target of 1,000 hours of flying. No. 2 Haryana Air Squadron has won the distinction of having logged the highest number of flying hours among all the N.C.C. Air Wing Units in the country during 1970-71. Such a fine

1. This bridge has been abandoned in 1972.

performance entitled the Club to be included in the Central Government Subsidy and Subvention Scheme under which it got Rs. 1 lakh as grant on recurring basis.

By 1969-70, the Club trained about 20 boys for Private Pilot Licences (P.P.L.) and 10 boys for getting their Commercial Pilot Licences (C.P.L.) from the Government of India. The Club which started with the help of two aircrafts loaned by Hisar Aviation Club, now possesses a fleet of 6 Pushpak Aircrafts of its own. The Club has also started night flying and instrument flying. This covers all types of flying training for the candidates up to the standard of Commercial Pilot Licence. More sophisticated aircrafts are expected to be added to the fleet of the Club. It is also proposed to add a Gliding Wing to the Karnal Aviation Club. The Director General of N.C.C. has promised to loan two gliders and a winch for the gliding wing of the Club.

The training of N.C.C. Air Wing covers drill, weapons training, civil defence and first aid as some of the subjects of general training, while principles of flight, airmanship, aeroengine, etc., forms the specialist service training. Aero-modelling, gliding and powered flying training are also provided to the cadets.

The State Government is doing its best to provide financial and other assistance to this Club. An Administration Block is under construction at the Karnal Aerodrome. It would also meet the other building requirements of the Aviation Club. Efforts are also being made to get Karnal Aerodrome licensed for night flying operations.

To make people interested in aviation, the State Government gives a scholarship of Rs. 10 per hour for the first 50 hours of flying to all the trainees from Haryana. A matriculate boy or a girl between the age group 17—20, preferably with Science as one of the subjects, is eligible to receive training on such a scholarship. Several refundable scholarships have also been sanctioned by the State Government for boys coming from lower and middle class families to enable them to get their Commercial Pilots and other senior aviation licences. The fact that six Haryana girls are at present undergoing flying training at this Club, highlights its popularity and the confidence it has inspired among the people. Even a large number of boys from other States are keen to join this Club. Such a rapid progress may secure for this Club an important place on the Aviation Map of India.

TOURIST FACILITIES

Simultaneously with the construction of the Grand Trunk Road, Sher Shah Suri provided facilities like shady trees, drinking-water and serais at short distances along the road. There were separate facilities for Hindu and Muhammadan travellers. Later, such serais were renovated and were made of pakka bricks by the Mughal emperors. The remnants of such serais still exist at Shahabad (Shahbad) and Thanesar, through which the Grand Trunk Road passed. The existing dharmsalas and serais owe their origin to the generosity of the rich residents of the towns. The important ones are : Aggarwal, Kamboj, Chaman Lal, Gaur and Roran Dharmsalas at Karnal ; Aggarwal Dharmsala, Kaithal ; Aggarwal Dharmsala, Panipat ; and Aggarwal, Birla, Bharat Sewa Sharan Sangh and Baba Kali Kamli Wala Dharmsalas at Kurukshetra.

Despite various places of historical and tourist interest, as described in the Chapter on 'Places of Interest', little effort was made to attract tourists. Before the creation of the new State of Haryana, no worth mentioning boarding and lodging facilities existed in the district although some sort of catering facilities could be found in some towns. This inadequacy was felt by the State Government which, in 1972, provided facilities at a number of places on the Grand Trunk Road passing through the district. Coming from Delhi one can have his first halt in the district at the 'Blue Jay', Samalkha, 66 Kilometres north of Delhi (52 kilometres south of Karnal). Here one can hire relatively cheap accommodation in a small tourist hut¹ or stop by for a quick cup of coffee at an espresso bar.² Down the road, after another 58 kilometres (about 6 kilometres north of Karnal and to the west of the Western Jumna (Yamuna) Canal where it crosses the Grand Trunk Road), is the prestigious Chakravarty Lake at Uchana.³ Indian, Chinese and continental food is available at the 'Whistling Teal' bar and restaurant

1. Well furnished and provided with bed linen there is one suite with attached bathroom. The charges are Rs. 12.50 for non-air-conditioned and Rs. 22.50 for air-conditioned.

2. The Red Robin Milk and Snack Bar has been opened at Gharaunda (35 kilometers north of Samalkha and 17 kilometers south of Karnal) since November 23, 1973. Besides bottled milk and snacks, one can buy milk products like ghi and milk powder.

3. This has been a successful effort to exploit the canal water readily available for the purposes of creating an artificial lake on an area which was lying waste because of the alkaline soil.

overlooking the lake. A nine-suite (double-bed rooms) tourist bungalow¹ has been set up by the side of the restaurant. Round the clock service and boating at the lake are added attractions.² Driving down another 32 kilometres one comes to Pipli³, the gateway to the great Hindu Pilgrimage Centre of Kurukshetra, and finds a modern tourist complex with its eight-suite (double-bed rooms) motel⁴ along with the 'Parakeet' restaurant and cafeteria with bar attached to it. The restaurant is meant to cater to those who prefer to pay a little more to eat and rest in air-conditioned comfort. The cafeteria, on the other hand, offers quick meals at moderate charges for those in a hurry. All types of arrangements at these places are looked after by the State Tourist Department.

A small private restaurant opened in July 1970 at Panipat, on the Grand Trunk Road, also provides moderate boarding and lodging facilities.

Rest houses are maintained by different departments of the Government to render facilities to officers in the discharge of their duties while on tour. The list of rest houses for the use of departmental officers along with the number of suites and officers who make the reservation is given in Table XXIX of Appendix.

POSTS, TELEGRAPHS AND TELEPHONES

POSTS

The post offices in the district were formerly controlled by the Superintendent, Ambala Division, Ambala, but a separate Superintendent of Post Offices was appointed at Karnal in 1952 to look after the work of posts and telegraphs in the district. It cannot be said with any certainty as to when the Karnal Head Post Office was established. Anyway, it was in existence in 1898. It was also a telegraph office at that time.⁵ An idea of the

1. & 4. Fully furnished and provided with bed linen, these suites have attached Indian and Western style bathrooms. The charges per suite are Rs. 25 for non-air-conditioned and Rs. 35 for air-conditioned.

2. The second phase of the Uchana tourist complex, to the right of the canal and opposite the Chakravarty Lake, has also been formally inaugurated on April 26, 1973. The canal thus lies in between the two phases of the complex and lends a special charm of its own. Called the Tourist Oasis, it consists of a meandering lake, a bar, petrol-cum-service station, first-aid post, shopping centre, mini emporium and a number of refreshment shops to suit all pockets.

3. Now in the Kurukshetra district.

5. *Source* : Superintendent of Post Offices, Karnal Division, Karnal.

growth of postal service in the district may be had from the following table :—

Particulars	Year						
	1910	1930	1952	1967	1968	1969	1970 (up to 31-3- 70)
Head Post Office	1	1	1	1	1	1	1
Sub-Post Offices	11	12	27	48	48	51	56
Branch Post Offices	40	43	129	283	286	292	292

The names of the post offices in the district as in 1970 are given in Table XXX of Appendix.

Growth of mail delivery.—Mail was delivered once a week in most villages till 1910. The postal service has made great strides after Independence. In 1970, 964 villages had daily delivery, 232 villages bi-weekly delivery, 44 villages tri-weekly delivery and the remaining weekly delivery. There is no village in the Karnal district where the mail is not delivered.

Mail in the towns is delivered twice on all the days of a week except Sunday.

TELEGRAPHS

In 1910, Karnal, Kaithal, Panipat, Pundri, Shahabad (Shahbad) and Thanesar had telegraph offices. Railway stations also accepted telegrams from the public but the service was not very satisfactory. The Canal Department, as well, maintained a private line of its own for departmental use.

There has been a lot of expansion in telegraph facilities since then and in 1970, such facilities were available at the following 33 post offices :

Asandh
Gharaunda
Gula (Guhla)
Indri
Kaithal
Kaithal Mandi
Karnal
Karnal City

Karnal Kutchery
 Karnal Model Town
 Karnal National Dairy Research Institute
 Karnal Partap Puri
 Karnal Ram Nagar
 Kaul
 Kurukshetra
 Kurukshetra University
 Ladwa
 Madlauda
 Nilu Kheri (Nilo Kheri)
 Panipat
 Panipat City
 Panipat Mandi
 Panipat Model Town
 Patti Kalyana
 Pehowa
 Pipli
 Pundri
 Radaur
 Samalkha
 Shahabad (Markanda)
 Siwan
 Tirawari (Taraori)
 Thanesar Town



TELEPHONES

The first telephone exchange in the district was opened at Karnal on June 7, 1935. In 1970, the following 18 telephone exchanges were functioning :—

Name of the exchange	Year of opening	Number of total working connections on 31-3-1970
Asandh	1969	23
Gharaunda	..	38
Indri	1963	23
Kaithal	..	245
Karnal	..	547

Name of the exchange	Year of opening	Number of total working connections on 31-3-1971
Kurukshetra	1958	180
Ladwa	1962	91
Madlauda	..	25
Nilu Kheri (Nilo Kheri)	1959	39
Nisang	1969	11
Panipat	..	373
Pehowa	..	71
Pipli	..	22
Pundri	..	23
Radaur	1964	33
Samalkha	1957	97
Shahabad (Shahbad)	1963	85
Tirawari (Taraori)	1963	43

WIRELESS STATION

There is a Police Wireless Station at Karnal for receiving and transmitting messages. It remains open for 24 hours. It is provided with a mobile wireless set fitted in a pick-up van for anti-dacoity and other emergencies.

Both communications and the means of transport have made a steady progress in all directions. If this rate of progress is maintained and improved, this district will come in closer touch with all important places in the neighbourhood and its economic, social and cultural life will register a very desirable advance.



सत्यमेव जयते

Chapter VIII

MISCELLANEOUS OCCUPATIONS

Miscellaneous occupations in rural and urban areas constitute a significant part of the life of the district. These include public and defence services, and all those working in the fields of education, medicine, law, engineering and transport. In addition to these fully or partly organised services, there are many people engaged in earning their livelihood on a self-employed basis. They either work in shops run by themselves, or at their own homes. Some go about hawking their goods or services.

PUBLIC SERVICES

There has been a considerable increase in the number of jobs in the public services under the State Government, Central Government and Local Bodies after 1947. This was due to the growth of new departments for developmental activities. In 1961, the number of persons employed in public services in administrative departments and offices of State Government, Central Government, Quasi-Government organisations, municipalities, etc., was as shown below :

	Males	Females	Total
Urban	2,491	14	2,505
Rural	3,211	19	3,230
Total :	5,702	33	5,735

However, the total number of employees stationed in the Karnal district on March 31, 1970, was 17,527. This number included all the employees actually holding civilian posts under the State Government whether permanent, temporary, contingency paid or work charged and also included persons on deputation from other State and honorary employees.¹

The persons in the employ of government and local bodies are given a dearness allowance related to some extent to the cost of living. In

1. *Census of Haryana Government Employees*, published in 1972 (Publication No. 87) by Economic and Statistical Organisation, Planning Department, Haryana Government, pp. 1, 6.

addition, class IV employees are provided with liveries. Since there are a few government houses, only the seniormost employees are allotted these houses against a deduction of 10 per cent of their pay for unfurnished accommodation. Government employees who have not been provided with Government accommodation are being given house rent according to the classification of towns on the basis of the population. Essential services like the railways, police and medical and public health are usually provided with residential accommodation.

Loans for the construction of houses under the Low Income Group and Middle Income Group Housing Schemes and for the purchase of vehicles are granted to State Government employees. They are also given an interest-free advance for the purchase of wheat every year recoverable during the same financial year.

Employees in public services are not restrained from forming associations or unions to safeguard their recognised service interests. Important of these employees' organisations functioning in Karnal itself are : National Dairy Research Institute Employees and Workmen Union, National Dairy Research Institute Workers Union, Indian Agricultural Research Institute Employees and Workmen Union, The Karnal Agricultural Research Sub Station Technical Class IV Mazdoor Union, Sugar Cane Sub Station Workers Union, Punjab Pradesh Bank Workers Federation, Government Medical Store Depot Employees Union, District Municipal Subordinate Union, Government Medical Store Depot Workers Union, National Dairy Research Institute Karamchari Union, Municipal Karamchari Union and Haryana Tubewell Mechanical Workers Union. Eleven other such organizations functioning in the district are : Government of India Press Workers Union, Nilu Kheri (Nilo Kheri) ; Government of India Press Employees Union, Nilu Kheri (Nilo Kheri) ; Clerks Association Government of India Press, Nilu Kheri (Nilo Kheri) ; Government Engineering Workshop Workers Union, Nilu Kheri (Nilo Kheri) ; Municipal Employees Workers Union, Pehowa ; Adarsh Union Municipal Karamchari, Panipat ; Municipal Employees Union, Kaithal ; Karnal Electric Supply Company Employees Union, Kaithal ; Municipal Karamchari Union, Kaithal ; Municipal Karamchari Association, Thanesar ; and Municipal Employees Union, Shahabad (Shahbad).

DEFENCE SERVICES

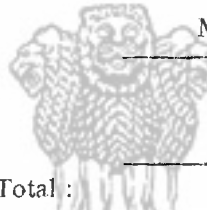
The Jats, Gujars, Rajputs and Gaur Brahmans in the district contributed a large number of recruits to the different branches of the defence services

during the two World Wars. In World War II, 13,062 persons were recruited from this district. In 1969-70, the number of ex-servicemen served by the District Soldiers', Sailors' and Airmen's Board, Karnal, and the number of families of serving personnel was 15,182 and 8,680 respectively. Most ex-servicemen belong to agriculturist families.

Sepoy Lehna Singh of Padha village (Karnal tahsil), still in active service, was awarded Vir Chakra in recognition of gallantry displayed by him while fighting the enemy during the Pakistani aggression in 1965.

EDUCATIONAL PERSONNEL

In 1961, the number of persons in educational services in colleges, schools and similar other institutions of non-technical type was 4,299 (3,374 men and 925 women). Their urban and rural break-up was as follows :—



	Males	Females	Total
Urban	1,610	708	2,318
Rural	1,764	217	1,981
Total :	3,374	925	4,299

During 1969-70, as a result of expansion of educational programme this number rose to 9,622 (7,565 men and 2,057 women).

Social conditions do not encourage unmarried girls to go for work in village schools. Even male teachers reside in near-by urban areas because of the scarcity of suitable residential accommodation in the villages. In these circumstances teachers living away from their place of work cannot make a full impact on the life of the village community.

The pay scales enjoyed by the teachers in private institutions are the same as enjoyed by the teachers in government institutions. The scales of pay of the teaching personnel working in the privately managed institutions were revised from December 1, 1967. This additional expenditure is borne by the Government as cent per cent grant-in-aid to the private school managements. Subject to certain restrictions, the Education Department has allowed the Government school teachers to engage in private tuitions which help them to supplement their income. Permission to prepare for various university examinations is freely given. In fact the Education Department offers incentives to teachers to improve their qualifications.

Teachers in schools and lecturers in colleges have formed unions to protect their service interests. State Education Services (Anglo-Vernacular) Teachers Union, Karnal and Government Classical and Vernacular Teachers Union, Karnal, perform this function in the case of government employees and Teachers Union of the privately managed recognised schools do so in the case of others.

MEDICAL PROFESSION

According to 1961 Census, 2,338 persons including 573 women were engaged in public health and medical services rendered by hospitals, nursing homes, maternity and child welfare clinics. This number, whose urban and rural break-up is given below, included medical services rendered by Veterinary Surgeons and individual Hakimi, Unani, Ayurvedic, Allopathic and Homeopathic Practitioners:

	Males	Females	Total
Urban	1,069	222	1,291
Rural	696	351	1,047
Total :	1,765	573	2,338

Private physicians play an important part in maintaining the urban population in good health. Many of them dispense their own prescriptions. A few of them charge a small consultation fee, but generally, the cost of the medicines supplied during the treatment covers the consultation fee. Those trained in dental surgery render a specialised service which is not generally available in government dispensaries. Some of the private practitioners do very well on the basis of their professional competence.

The District Medical Association and Ayurvedic and Unani Chikitsik Mandal, formed by members of the medical profession disseminate professional knowledge and promote the social and economic condition of their members.

LEGAL PROFESSION

This profession includes barristers, advocates, pleaders, attorneys, law assistants, munshis, etc. According to the 1961 Census, the number of persons engaged in legal services was 325 :

	Males	Females	Total
Urban	285	—	285
Rural	40	—	40
Total :	325	—	325

Being educationally backward, the Karnal district had very little scope for the growth and development of the legal profession. As reported in the Karnal District Gazetteer, 1918, (p. 144), the legal practitioners working in the district were 3 Barristers, 5 1st grade and 16 2nd grade pleaders, 8 Mukhtars and 7 Revenue Agents. Of these, 5 pleaders and 2 Mukhtars practised in Kaithal and 3 Mukhtars in Panipat. The rest practised in Karnal. There were 6 1st grade and 34 2nd grade petition-writers, of whom 22 worked in Karnal, 8 in Kaithal, 4 in Thanesar, and 5 in Panipat.¹ With the spread of education the position continued changing and, along with the increase in other professions, there has been a steady increase in the number of lawyers and advocates also as the following figures pertaining to the Karnal Bar Association² indicate :—

Year	Lawyers and advocates
1927	37
1940	54
1950	81
1960	100
1967	132
1970	276 (including 29 pleaders)

The district depends mainly on agriculture. During the first quarter of the 20th century, rather up to 1935, the financial position of cultivators was not satisfactory in spite of the effort to introduce co-operative credit. They had to borrow money from the village money-lenders to meet their necessary requirements, e.g. agricultural implements, seeds, etc. The exorbitant rate of interest charged usually hindered repayment of the principal and led to money suits. With the enactment of legislation³ in this behalf during the years 1935—38, such suits dwindled and the legal profession in the district received some set-back. But thereafter the trend of litigation took turn to pre-emption suits and declaratory suits. These continue till today.

1. The total number of petition-writers is 40 whereas the break-up is for 39. Obviously there is some printing error.

2. For more details the chapter on 'Law and Order and Justice' may be referred.

3. (i) The Relief of Indebtedness Act, 1935.

(ii) The Punjab Debtors Protection Act, 1936.

(iii) The Money-Lenders Act, 1938.

The spiralling rise in the prices of land and improvement in the financial position of the agriculturists after Independence, are the two main factors leading to an increase in litigation. Although dacoity and robbery have been eliminated, the other crimes in the district have been on the increase and provide a good crop of cases for persons engaged in the legal profession. So far as urban areas are concerned, cases of dispute between landlords and tenants under the East Punjab Urban Land Restriction Act, 1949, keep cropping up in addition to business disputes.

ENGINEERING SERVICES

In the past few years, there has been an increasing demand for engineering personnel required for various developmental and nation building activities including construction and repairing of canals and bunds and sinking of tubewells. Many new electricity distribution units have been set up at different places in the district to extend rural electrification. The emergence of the district to prominence in the field of industries and transport has necessitated the commissioning of engineering services for the development of roads and buildings. The following list of offices at the district headquarters and elsewhere indicates the nature and organisation of official engineering activity :—

Public Health Division, Karnal; Karnal Circle (B & R), Karnal; Karnal Division, Western Jumna (Yamuna) Canal, Karnal; Pehowa Division, Kaithal; Karnal Drainage Division, Karnal; Mechanical Drainage Division, Karnal; Investigation Drainage Division, Karnal; Tubewell Division, Karnal; Karnal City Division (Haryana State Electricity Board), Karnal; Suburban Division (Haryana State Electricity Board), Karnal; Operation Division (Haryana State Electricity Board), Kurukshetra; City Division (Haryana State Electricity Board), Panipat; Suburban Division (Haryana State Electricity Board), Panipat; Kaithal Division (Haryana State Electricity Board), Kaithal; and Maintenance and Test Division, Karnal.

A few persons also work as contractors, architects and surveyors.

The Karnal district has the unique distinction of having the only Engineering College in the State located at Kurukshetra¹ and a polytechnic institute at Nilu Kheri (Nilo Kheri).²

1. Now the Kurukshetra District.

2. For details see chapter on 'Education and Culture'.

TRANSPORTERS

Transport requires the services of people working on railways, ferries, buses, motor vehicles and all those who drive bullock carts and attend pack animals. In 1961, 5,786 persons were employed in all these transport activities.

Rickshaw-pullers mostly appeared on scene after the Partition. Most of them obtain rickshaws on hire and pay Rs. 2.00 to Rs. 2.50 a day to rickshaw-owners. The rickshaw charges in the district are cheap. On an average they earn about Rs. 200 to Rs. 250 per mensem.

Many tonga drivers own their tongas, but their earnings greatly dwindled after the Partition owing to the ready availability of the bicycle-rickshaws at cheaper rates. The other advantage was that the rickshaws took the passengers to their residence located even in the narrow lanes into which no other vehicle can enter. There are now only a few tongas seen plying on the city roads, but country tongas are in common use for transporting passengers to the country-side. With the establishment of the Kurukshetra University a few tongas ply between Pipli (on the Grand Trunk Road) and the University Campus. Since there are few buses to Kurukshetra Railway Station and Thanesar, the passengers bound for these places drop at Pipli and resort to tonga service for further transportation. In recent years, the use of the tempo (a three wheeled auto-vehicle), has adversely affected the income of country tonga drivers.

Transport workers, *viz.* drivers, conductors, cleaners, etc., have been employed by transport companies. They are provided with facilities like uniforms, bonus and overtime allowance. Their economic and social lot is better than that of rickshaw-pullers and tonga drivers. The following unions for different categories of workers safeguarded their professional interests :—

District Tonga Rehra Workers Union, Karnal ; The Karnal General Transport Workers Union, Karnal ; District Motor Transport Workers Union, Karnal ; District Goods Transport Workers Union, Karnal ; Indian Motor Transport Workers Union, Karnal ; Four Wheeler Tempo Workers Union, Karnal ; Panipat Rickshaw Pullers and Workers Union, Panipat and District Karnal Goods Transport Workers Union, Samalkha.

There are a few private motor cars and jeeps. The owners usually do

not keep chauffeurs but drive their vehicles themselves.

PERSONAL SERVICES

Among these are included barbers, washermen, launderers and tailors.

Barbers.—Their number, which also included hair dressers and related workers, according to the 1961 Census was 2,700 :

	Males	Females	Total
Urban	482	—	482
Rural	2,153	65	2,218
Total :	2,635	65	2,700

In urban areas the old practice of a family barber became extinct with the growth of money economy. People pay to the barbers for service at home or go to hair cutting saloons for this purpose. Hair cutting charges (1969) vary from 0.50 to 0.60 paise and shaving charges from 0.25 to 0.30 paise. There is no lady hair dressing saloon in the district as there does not appear to be sufficient demand for it. In villages, however, the old practice of the family barber is still in vogue. He can still be seen on certain social ceremonies. He also attends to his *Yajmans* (patrons) at their residence and gets remuneration in kind at the time of harvesting. The wife of the barber called *nain* also does some sort of hair cleaning and hair dressing of women in villages.

Washermen.—In 1961 their number, as shown below, was 740 and included dhobis, launderers, dry cleaners and pressers:

	Males	Females	Total
Urban	399	39	438
Rural	245	57	302
Total :	644	96	740

Dhobis mostly serve the urban areas for the villagers do their washing themselves. They generally charge 20 paise per article of clothing. They attend to the customers at their residence. The launderers on the other hand run regular shops and do not undertake home delivery. They

charge higher rates. Still, because of their quick and efficient service the launderers are gaining popularity over the dhobis. The laundry-men either use washing machines or employ dhobis for washing and additional persons for ironing. Launderies combined with dry cleaning has no doubt become a profitable business as the existence of several such establishments shows. A woollen suit is dry cleaned for Rs. 3.00.

The laundry business has affected the common dhobi and he has gradually sought employment with the launderer. The dhobis in the district hail mostly from Delhi and Uttar Pradesh.

Tailors.—Their number in 1961 was 5,534 (3,375 males and 2,159 females) which included cutters, furriers and related workers. In urban areas the tailors make shirts, trousers, bushirts, pants, pyjamas, blouses and suits; while tailors in rural areas generally make trousers, *kurtas* and *ghagaris*. With the passage of time the style of clothes has undergone a complete change. The *ghagaris* and *chandnas* are being replaced by *salwars* and *kurtas* and *sarees* and blouses.

The standard of tailoring in urban areas of the district is good enough and proximity of Delhi causes the import of latest sartorial designs. Some cloth merchants accommodate a tailor or two in a corner of the shop. This combined facility promotes quick sales of cloth apart from bringing them some additional benefit from the tailoring charges. The tailoring charges vary from place to place and shop to shop depending upon the standard of living of the people and the stitching skill of the tailor. The usual charges for stitching garments (1969) are as follows :—

Type of garment	Stitching charges	
	Urban	Rural
	(Rs.)	(Rs.)
Gents		
Shirt (Cotton)	2.25	1.75
(Terylene)	5.00	4.00
Trousers	0.75	0.50
Bushirt	3.50	3.00
<i>Kurta</i>	2.50	1.75
Woollen Coat	28.00	22.00
Woollen Suit (coat & pants)	38.00	30.00
Terylene pants (with trimmings)	15.00	10.00
(without trimmings)	10.00	7.00
Ladies		
<i>Ghagari</i>	7.00	5.00

Type of garment	Stitching charges	
	Urban	Rural
	(Rs.)	(Rs.)
<i>Salwar</i>	2.00	1.50
Shirt	3.00	2.00
Cotton Suit (<i>salwar</i> & shirt)	5.00	3.50
Woollen Suit (<i>salwar</i> & shirt)	6.50	5.00
Woollen Coat	28.00	20.00
Blouse	2.50	1.50

In the past there used to be family tailors in villages who, besides receiving some cash for tailoring got a share of foodgrains at harvesting. They used to visit their patrons to obtain orders, but this custom is not in vogue except in some villages of the Kaithal tahsil.

Most tailors in urban areas often run tailoring establishments which are patronized by their old clients and stray customers. They perform the expert cutter's job themselves and engage workers to assist them in stitching the garments according to their requirements. Such workers are paid Rs. 70.00 to Rs. 125.00 per month according to their skill and experience. Those engaged on contract basis are paid 60 per cent of the amount charged from the customers. Most of the tailors have their own sewing machines which they usually purchase on a hire-purchase system.

DOMESTIC SERVICES

In rural areas, hardly any family employs a servant for domestic work. Most rural women attend to their domestic work themselves. Some of the bigger agriculturists may, however, employ *halis* to help them in their agricultural operations and also do domestic chores. These persons who are generally landless labourers are paid a fixed proportion of the harvest. If engaged on cash wages they generally receive money in advance, varying from Rs. 30 to Rs. 40 a month.

In urban areas, the upper middle class in services and the more well-to-do people often employ part-time or full-time domestic servants.

Domestic service entails the performance of many kinds of duties by the same person. The Indian situation does not usually favour specialised jobs. For example, a single domestic servant engaged in a household may be required to buy eatables in the market, cook food at home, clean the used dishes and plates, scrub utensils, sweep the house, make the beds and in

fact do anything else at the bidding of the master. It can be a hard life full of daily chores. The number of domestic servants in 1961 was 7,277 (3,489 males and 3,788 females).

A domestic servant is paid between Rs. 30 and Rs. 40 per month in addition to board and lodging. Such servants hail either from backward hilly areas or from Uttar Pradesh. There is a growing need for domestic servants in households where both the husband and wife are working people. Further, with the opening of other avenues in public and industrial undertakings which provide increasing opportunities of employment, domestic servants are becoming relatively more scarce in relation to demand. Some women work as part-time domestic servants in a number of houses for cleaning utensils, sweeping and helping the housewives in their daily chores. Such a part-time domestic worker gets about Rs. 10 to Rs. 15 per month.

SELF-EMPLOYED PERSONS

The scope of work of self-employed persons is very wide. It includes *jalahas* (weavers), *mochis* (shoe-makers), sweepers, potters, hand-cart pedlars, hawkers, *pandas* (priests) and all other persons who work for their living or sell their individual services on demand. Changing circumstances give rise to some new occupations. Take for example the public eating houses. The growing habit of eating outside has led to a number of restaurants, snack bars, coffee houses and tea stalls. Likewise, the desire to wear standardised clothes is responsible for shops dealing in ready-made garments. The increasing use of bicycles, auto-cycles, cycle-rickshaws, scooters and motor cars has been responsible for cycle-repairers and auto-mechanics. The recent trend toward mechanised farming has led to the opening of tractor repair workshops. A number of shops dealing in agricultural implements and motor and tractor spare parts have also been set up. There is a host of shops of all kinds, *halwai* shops, *pan-bidi* shops, shops manufacturing or selling aerated water (soft drinks), shops dealing in grocery and vegetables and fruit shops. Bakeries sell their products directly or through agents. Goldsmiths manufacture gold and silver ornaments. Shops dealing in general merchandise, oilman's stores and consumer goods and novelties also cater to the needs of the people. Among self-employed people are those who do not remain at one place but keep on moving from one place to another. Their list which may include beggars, street singers, jugglers and quacks, is almost inexhaustable.

The time-old *jalahas* (weavers), *mochis* (shoe-makers), potters and sweepers are spread through the district. Most of them in the rural areas still help families in their agricultural activities and perform their customary professional services

on the occasion of marriages and other ceremonies. The weavers in the district are specialised and most of them are concentrated at Panipat where they engage in the manufacture of furnishing fabrics. They have organised themselves into co-operative societies. The Government provides them with loans, technical advice and various other facilities. A weavers' colony has lately emerged at Panipat. The *mochis* who function only as cobblers usually roam about in the streets, hanging their equipment by the shoulders in a box. They usually attend to the repairing, mending and reconditioning of shoes. Others who take to shoe-making have their own shops which undertake the making of new shoes. The potters make ordinary vessels mostly for the use of villagers. The earthen pitchers and *surahis*, because of their property to cool the water, are sold in large numbers during summer season both in urban and rural areas. The sweepers engaged in cleaning houses in urban areas get a few rupees per month in addition to a *chapati* daily or weekly and occasionally small gifts in cash or kind on festivals and ceremonial occasions. In recent years, owing to better employment facilities and privileges, the sweepers have been shifting over to services in Government offices and private organisations.

The hand-cart pedlars and hawkers go about the towns and villages hawking their goods. The goods which they sell include among other articles of daily use, vegetables, fruit, eatables, general merchandise, crockery, cloth and toys.

A typical class of *pandas* is found at religious places like Kurukshetra, Pehowa and Pharal. People keep coming to Pehowa throughout the year to perform certain customary religious ceremonies related to the dead. Kurukshetra becomes a centre of great activity on the occasion of religious fairs when it hums with pilgrims from all parts of India. At Kurukshetra and Pehowa these *pandas* maintain reliable family trees (called *pothis*) of pilgrims who have visited these places for generations. They perform the customary religious practices for the families to which they have attached themselves and make good money for their services.

Except in very small villages, a tea-stall of some kind has made its appearance almost in all parts of the district, its appearance depending on the clientele, local and otherwise which patronizes it. The smaller ones managed by a single person and serving nothing but tea are generally shabby. The bigger ones which also serve other hot and cold beverages and some eatables are more presentable in appearance and are manned by a number of people. A few modern-type restaurants have also sprung up in the urban areas and

these engage cooks and bearers according to the size and requirements of the establishment.

The rapid and continuous increase in the number of bicycles both in the urban and rural areas has made the vocation of bicycle repairing much popular. No high skill is required for this job. Bicycle repairers are therefore found in every nook and corner of the district. Although slack during rainy season, the business remains brisk throughout the year particularly during the summer when persons with bicycle repair tools can be seen under the shade of trees by the roadside. On the other hand, the auto-mechanics have their shops only in urban areas.

In every town and a big village one comes across shops dealing in general merchandise. These goods comprise toilet articles (as combs, hair-brushes, mirrors, etc.), soaps, oils, tooth-pastes, tooth-brushes, shoe-polishes, hosiery articles, ready-made garments and sundries of daily use. They have flourishing business in the sense that with the rise in the standard of living there is an increasing demand for consumer goods and in fact new shops keep coming up into existence.

Every town and big village of the district has a number of *halwai* shops. In the old days their familiar sweetmeat preparations were *laddus* and *jalebis*. The development of communications and an increasing contact with other parts of the country have introduced some new sweetmeat preparations like *gulab jamuns*, *rasgullas*, *barfi* and *halwas* of variety. In urban areas sweetmeats prepared from milk are more popular. These shops are generally one-man units employing two or three or even more persons according to the requirements of the establishments. This business provides employment throughout the year.

Pan-bidi stalls are tiny shops which are a familiar sight throughout the district. These one-man units in towns which usually sell cigarettes also become social centres for people who stop to listen to the radio broadcasts and film music and talk about current events.

In old days every place of some significance had a unit which manufactured aerated drinks for local consumption. With bottled drinks being made available in many places by large manufacturing units, their number is on the decrease. In recent years coca-cola and other bottled soft drinks like gold spot have become very popular and it is fashionable to drink these with a straw put into the bottle. Such drinks are imported in the district both from Delhi and Chandigarh. In fact coca-cola has attained a sort of

established fame and it is freely offered in all big functions and marriage celebrations.

A grocer supplies the basic necessities of daily use. A number of such shops can be found in every locality. Although these are one-man establishments, generally a helper is also engaged. Every town has a number of shops selling vegetables and fruits. Enterprising people carry vegetables and fruits on their *rehris* and sell these to customers at their doors.

It is not unusual to come across a bakery even in a small town. The bakeries have gained popularity owing to the demand for their ready products. Such establishments are mostly one-man units. The proprietor engages one or two persons for preparing products as bread, cakes, biscuits, pasteries, etc. The bakery units sell their products in wholesale as well as in retail. Usually the grocers and hawkers buy these products wholesale and retail these to their customers along with other articles.

Different types of gold and silver ornaments are prepared in gold-smiths' shops. The ordinary goldsmith cannot afford to purchase or stock precious metals like gold and silver. These are, therefore, supplied to them by the customers who place orders for ornaments. However, richer goldsmiths have their own stock and they prepare ornaments even without taking the metal in advance from the customers. This business is very brisk at the time of marriages.

Beggars are to be seen everywhere. Some of them expose their crippled or wounded limbs to evoke pity for alms. At bus stands we see women and children showering their blessings and goodwill continuously in order to strike a generous chord in the heart of the giver. Others try to entertain the people by singing before they beg for money. Common jugglers usually earn their living by showing feats of jugglery and other tricks to an audience they manage to collect. Occasionally, we may find a *bandarwala* or *richh-wala* entertaining the people by showing the feats of monkeys or the bear he has trained for the purpose. The snake-charmer also belongs to this category. What these people collect in return for the entertainment they provide is anybody's guess. The quack who exhibits his medicinal stuff on the roadside and uses his powers of oratory to extol the potency of his medicines is a familiar sight everywhere. He is usually successful in palming off his stuff to credulous people and before long moves off to another station to avoid receiving complaints about his ineffective preparations.

Chapter IX

ECONOMIC TRENDS

INTRODUCTION

The Chapter on 'Economic Trends' is significantly designed to present the growing impact of economic forces on society, reflecting the development which has taken place in the livelihood pattern. Change has occurred in the socio-economic fields as a result of the implementation of the Five-Year Plans beginning with an era of planning in 1951. The strategy of development itself has varied prior to and after the reorganisation of the State since November 1966.

GROWTH OF AGRICULTURE

Agriculture has been for long the mainstay of livelihood of the majority of the people in the Karnal district. Almost throughout the first half of the present century the economy of the district was centred in the rural areas and it revolved round the agriculturist. Even according to the 1961 Census, 67 per cent of the total working population derived its sustenance from agriculture. The fact is borne out in the following table giving break-up of working population by industrial category :—

Industrial category	Number of workers			Per-centage to total number of workers
	Rural	Urban	Total	
1	2	3	4	5
1. As cultivators	2,86,563	7,006	2,93,569	57.56
2. As agricultural labourers	47,030	2,435	49,465	9.63
3. In mining, quarrying, livestock, forestry, hunting, orchard and allied activities	2,932	1,060	3,992	0.79

1	2	3	4	5
4. At household industry	33,910	8,279	42,189	9.25
5. In manufacturing other than household industry	7,898	11,391	19,289	3.73
6. In construction	4,523	3,476	7,999	1.57
7. In trade and commerce	12,805	14,634	27,439	5.50
8. In transport, storage and communication	1,800	4,713	6,513	1.38
9. In other services	38,465	20,163	58,628	11.59
Total :	4,35,926	73,157	5,09,083	100.00

It would be observed from the above table that 67 per cent of the total working population in the district, consisting of cultivators and agricultural labourers taken together were engaged in agricultural pursuits, 9.2 per cent depended on household industry, 5.5 per cent were engaged in trade and commerce and 11.59 per cent in other undefined services. The proportion of people engaged in other vocations was quite insignificant, ranging from 0.79 per cent in mining and quarrying, etc., to 3.73 per cent in manufacturing. Thus it is evident that agriculture has been the major source of income to the people of the district, it being the crucial sector not only from the point of view of livelihood but in the growth of agro-based industries.

Before Haryana was organised as a separate State, the implementation of Five-Year Plans projects as a whole was quite slow both in agriculture and industry. It was in 1967-68 that in view of its vast agricultural potential and prevalence of good agro-climatic conditions, the Karnal district was selected as one of the districts in the whole country for Intensive Agricultural District Programme (I.A.D.P.), popularly known as 'Package Programme'. This programme is devised to provide better facilities to the farmers through strengthened administrative structure and assured adequate supplies of inputs consisting of fertilizers, improved seeds, credit facilities and technical know-how. The following detailed programme of the State Agriculture

Department shows how the 'Package Programme' was to be carried out :—

- (a) Adequate and timely supply of credit, based on the production plans, to be made available through strengthened co-operative societies.
- (b) Adequate and timely supply of production requisites such as, minor irrigation works, improved seeds, fertilizers, pesticides, implements, machinery, etc.
- (c) Arrangement for marketing and other services to enable the cultivators to obtain full market price for their marketable surplus.
- (d) Adequate storage facilities for supplies such as, seeds, fertilizers, pesticides and implements, and for the farm produce.
- (e) Intensive educational efforts, particularly through scientific demonstrations, for dissemination of techniques of improved agricultural production.
- (f) Strengthening of transport arrangements to ensure mobility of supplies and staff.
- (g) Planning at the village level and cultivator-wise for increased production.
- (h) Establishment of agricultural implements workshops, seed and soil testing laboratories.
- (i) Analysis and evaluation of the programme from its initiation to its completion.

As a result of implementation of the Intensive Agricultural District Programme, popularly known as I.A.D.P., the total cropped area and the production of foodgrains have tremendously increased in the district. The total cropped area and the production of foodgrains which were 471 thousand hectares and 225.4 thousand metric tonnes respectively in 1950-51 rose to 887 thousand hectares and 931.7 thousand metric tonnes respectively in 1967-68. In 1969-70, the cropped area touched the peak level of 890 thousand hectares and attained the highest level of production of 1,224 thousand metric tonnes of foodgrains. It is anticipated that the total cropped area

may increase to 925 thousand hectares by 1973-74 due to double cropping, out of which 785 thousand hectares is expected to be devoted to the production of foodgrains. The following table presents an ever rising trend in the total cropped area and production of foodgrains in district Karnal :—

Plan year	Cropped area	Percentage increase over 1950-51	Production of food-grains	Percentage increase over 1950-51
	(Thousand hectares)		(Thousand metric tonnes)	
1950-51	471	..	225.4	..
1955-56	691	46.7	426.1	91.7
1960-61	777	64.9	646.2	186.6
1965-66	774	64.3	590.2	161.8
1966-67	822	74.5	663.4	194.3
1967-68	887	88.3	931.7	313.3
1968-69	805	70.9	895.1	297.1
1969-70	890	88.9	1,224.0	443.0
1973-74	925	96.4	1,250.0	454.5

Thus the tremendous increase in area and production has been mainly possible due to highly sophisticated inputs applied to the cultivated area under the I.A.D.P. and the High Yielding Programme. The consumption of fertilizers in the district during 1969-70 worked out to about 71 kg per cultivated acre, an achievement equalling that of I.A.D.P. Ludhiana (Punjab), which is considered to be one of the leading districts in I.A.D.P. throughout the country. During a short span of 3 years from 1967-68 to 1969-70, the consumption of fertilizers in the district has gone up from 58,380 metric tonnes to 1,05,628 metric tonnes and is likely to attain the all-time high record of fertilizer consumption of 2,60,000 metric tonnes by

1973-74 marking the end of the current Fourth Five-Year Plan.

The same is the case with the expansion of irrigational facilities in the district. A stupendous programme of energising of tubewells has led to an increase in the irrigated area from 20,000 hectares in 1967-68 to 1,78,000 hectares in 1969-70. The number of tubewells energised in the district has likewise gone up from 9,830 in 1967-68 to 24,550 in 1969-70.

The Soil Testing Laboratory in I.A.D.P. Karnal is working to its full capacity to interpret samples of soils received and recommend requisite doses of fertilizers. Approximately 30,000 samples are analysed annually against the capacity of 15,000 samples. Plant protection measures are being adopted systematically to safeguard the crops from insects, pests and other diseases.

The developmental efforts made by the present State Government in the Karnal district in the field of agriculture, have raised the level of production from a very low base which existed in the beginning of the century. It is now an agriculturally advanced district of the State. In 1970-71, it accounted for 30 per cent of the total foodgrains production of the State, three-fourths of its rice and over one-third of wheat. It is expected that an overall 8 per cent growth rate in agriculture will be achieved in this district as compared to an all-India growth rate of 5 per cent to be attained in this sector by the end of Fourth Five-Year Plan (1973-74).

GROWTH OF INDUSTRY

During the British regime there was no sustained effort for the growth of industries in the country. Whatever industries had come up were established around the presidency towns and no attempt whatsoever was made for the promotion of industries in the interiors. In 1947 when India became independent, there was no industrial base. The Karnal district was no exception to the general apathy on the part of the British rulers.

In the equitable growth and promotion of industries an attempt to remove regional imbalances was only made after 1947. The Constitution of India has provided a federal system of Government and has divided the subjects falling within the jurisdiction of the Union and State Governments. The subject of 'industries' is included in the Concurrent List in respect of which both the Union and State Governments are competent to legislate. As such, efforts were made by the State Government on its own as well as through the agencies of the Union Government towards the promotion of industries. But unfortunately, the developmental efforts to establish a

sustained industrial base were not significant in this part of the erstwhile Punjab which now comprises Haryana. It was after the formation of Haryana in November 1966 that the State Government began to develop its industrial potential concerning large, medium and small-scale industries in the State. To this effect, about Rs. 920 lakhs were allocated in the Fourth Five-Year Plan. The Karnal district which is centrally located, is also receiving attention of the State Government in establishing large, medium and small-scale industries.

The process of economic growth is slow in a backward country and it becomes even slower in backward areas. There is a natural tendency on the part of the entrepreneurs to cluster round the existing developed areas. There is reluctance to move to new areas, unless conditions are created under which industry can thrive and special inducements and concessions are given to make it worthwhile to undertake risks. This necessitates creation of social overheads as well as conditions of loan, power, credit and essential raw materials on equitable basis. In this context, the foremost measures adopted by the State Government were to develop industrial areas/colonies and urban and rural industrial estates. The establishment of industrial areas was necessitated primarily by the problem of rehabilitation of refugee entrepreneurs who migrated from West Punjab at the time of Partition in 1947. The refugees mostly from Shekhupura, Gujranwala, Multan and Muzaffargarh districts of West Punjab (now in Pakistan) settled in this district¹ As a matter of fact, the State Government under a directive from the Union Government launched a programme of developing industrial areas where refugee entrepreneurs could be rehabilitated by allotting to them land and providing power and capital for the purchase of machinery and equipment. Accordingly, four industrial areas were established during 1948—50 in the region now forming Haryana State. One such industrial area was located at Panipat (district Karnal)² where 225.6 acres of land was acquired and split into 162 plots. According to the survey conducted by the Economic and Statistical Organisation, Haryana, in 1968-69, 151 plots had been sold through auction and the remaining 11 plots were reported to be still lying unsold. The findings of the survey further revealed that of the 151 auctioned plots, buildings had been constructed on 97 plots and were under construction on 17 plots. Again, of the 97 plots on which buildings had been constructed, industrial units started functioning only on 80 plots. This shows that

1. The figure of refugee population according to the 1951 Census was 2,50,471.

2. The other industrial areas were located at Sonipat, Bahadurgarh (district Rohtak) and Yamunanagar (district Ambala).

in 20 years, only 50 per cent of the plots had been properly utilised. The progress was reported to be slow mostly due to lack of proper civic amenities.

In order to give fillip to the entrepreneurs, urban and rural industrial estates were established in 1955. Of the 6 urban industrial estates in Haryana, the urban industrial estate at Nilu Kheri (Nilo Kheri) in this district was set up in 1962.¹ The main criteria for the location of these estates in urban areas were the possibilities of developing industrially backward areas in which man-power supply was readily available. The idea was to encourage investment in these areas in the industrial sector by providing financial assistance and other facilities to the entrepreneurs desirous of starting industries. The distinct feature of these estates, however, is that before allotting plots, the necessary buildings in the shape of sheds of various sizes are provided by the Government to enable the entrepreneurs to start working without much difficulty. The survey of 1968-69 revealed that of the 14 sheds constructed by the Department of Industries at Nilu Kheri (Nilo Kheri), 4 were still lying vacant. Seemingly, lack of necessary infrastructure had stood in the way of fuller development of the industrial estate at Nilu Kheri (Nilo Kheri). The State Government spent Rs. 3,86,873 for the development of industrial estate there. It was concluded that a serious attempt for the promotion of industries in the district through the provision of infrastructure in the industrial estate was bound to encourage the industrialists from within and without the State to set up industrial units on the remaining plots more especially, in view of the recent incentives announced by the State Government in the form of concessions in sales-tax, octroi, inter-State sales-tax, duty-free generation of power, etc.

Likewise the establishment of the rural estates had been necessitated to cover the gap of seasonal unemployment in the agricultural sector and to provide an industrial base in the rural areas. Of the 9 rural estates in the State, 2 rural estates were established at Kaithal² and Kohand in 1963 and 1965 respectively. The former was completed on February 1, 1965 and the later on May 12, 1967. The State Government had spent Rs. 1,84,686, and Rs. 67,912 for the development of Kaithal and Kohand rural industrial estates respectively.

1. The other five urban industrial estates were set up at Sonapat, Ambala, Hisar, Narnaul and Gurgaon.

2. In the Kurukshetra district since January 23, 1973.

The value of goods marked by the quality marking centre at Panipat set up to standardise the quality of products produced in the industrial estates rose from Rs. 9,59,766 in 1966-67 to Rs. 12,14,431 in 1967-68.

Although detailed information relating to various categories of industrial units set up under large/medium-scale and small-scale pattern has been provided in the Chapter on 'Industries', yet from the point of view of examining economic impact due mainly on account of growth of industries in the district, a brief mention here seems quite essential.

The Small Industries Service Institute, New Delhi, in collaboration with the Industries Directorate, Haryana, surveyed during 1967-68, the industrial potentiality of the Karnal district in order to study :

- (a) the economic facilities and resources available in the area;
- (b) the existing and future demand for manufactured items within the district;
- (c) the present position of existing industries ; and
- (d) the scope of existing industries and prospects of the development of new units. Besides, prospects of the development of handloom and woollen textile industries have been studied with the help of Regional Officers of the Textile Commissioner's Office at Amritsar.

It was observed that the small-scale industries in the district had not developed to an appreciable extent. The industrial activity in general in the district was mainly confined to the production of handloom goods, woollen yarn, agricultural implements, steel pipes, footwear, etc. Since there were not many large tracts of forests nor any mineral wealth available in the district, industries based on these resources were not developed. There were 5 large-scale units registered with the Director General of Technical Development. These units were engaged in the manufacture of card board, alcohol and its products, acid and chemicals, extraction of oil by solvent extraction process and sugar. The total investment in these units was Rs. 1.78 crores and they produced goods worth about Rs. 1.63 crores annually employing about 1,361 workers.¹

The most important cottage industries in the district are : handlooms, carpet making, woollen blankets and leather footwear. Out of the 10,000

1. *Report on Industrial Potentialities in Karnal District (Haryana)*, 1969.

handlooms in Haryana, about 8,000 (75 per cent) are located at Panipat in this district. The total investment in the industry is estimated at Rs. 1 crore and annual production works out to Rs. 4 crores. Since the industry is not well organised, the production is still 50 per cent of its installed capacity. However, the industry provides employment to about 15,000 workers and by and large this is the main source of livelihood of at least 1/3 of the population of Panipat. Likewise, carpet making industry is located at Panipat. There are three factories engaged in this industry with 37 looms employing 40 workers, which annually produce goods worth Rs. 2.5 lakhs. With regard to leather footwear, there are about 2,460 cottage and small-scale units engaged in the manufacture of leather footwear. They are working with an investment of Rs. 11.6 lakhs giving employment to 3,254 persons. The value of their production during 1967-68 was about Rs. 29 lakhs. These units are scattered throughout the district but their main concentration is in and around Karnal. The cottage units also do the tanning of hides and skins although by crude methods.

About 1,200 small-scale units, both organised and un-organised, are registered with the Director of Industries. The total capital investment in 350 of these small-scale units for which information is available is Rs. 213.61 lakhs and their estimated annual production is Rs. 316.54 lakhs. These small-scale units provide employment to 2,822 persons.

The table below provides a bird's eye view of a number of industrial units split up into two broad categories, viz. large/medium-scale and small-scale along with details relating to investment, value of production and employment generated in the industrial sector during the period 1966-67 to 1969-70 :

(i) Large/medium-scale Industries

Year	Number of units	Investment	Production	Employment
		(Rs. in lakhs)	(Rs. in lakhs)	
1966-67	5	128	163	1,300
1967-68	7	200	226	1,350
1968-69	8	300	400	1,400
1969-70	9	400	600	1,500

(ii) Small-scale Industries

Year	Number of units	Investment	Production	Employment
		(Rs. in lakhs)	(Rs. in lakhs)	
1966-67	1,300	500	700	15,000
1967-68	1,350	550	800	16,800
1968-69	1,400	600	850	18,500
1969-70	1,500	650	1,000	20,000

It would be observed from the above table that the investment in large and medium-scale industries has substantially stepped up from Rs. 1.28 crores in 1966-67 to Rs. 3.00 crores in 1968-69. The increased investment has provided employment to the trained personnel which has gone up by 7.7 % (base 1966-67). Likewise, the value of production during the same period has risen from Rs. 1.63 crores to Rs. 4.00 crores during 1966-67 to 1968-69. The development of small-scale and cottage industries has made noteworthy strides and investment and value of production in this sector of industries have risen from Rs. 5.00 crores and Rs. 7.00 crores respectively in 1966-67 to Rs. 6.00 crores and Rs. 8.50 crores in 1969-70. Besides, the small-scale and cottage industries are catering employment for 18,569 persons on an average per annum.

It is only during the last one decade that industries, more especially in the small-scale and cottage industries sectors, have sprung up; prior to this there was a negligible industrial base in the district. There is a vast unexploited potential for development of industries and it is envisaged that on account of its pivotal situation in the State and proximity to the national capital for procurement of raw material and offtake of industrial products, the district is bound to flourish in the field of industries. At present only the work of repair and maintenance of a large number of tractors in operation under the I.A.D.P. provides technical employment to a considerable number of people. Large-scale developments in this area would, however, depend on various factors relating to the location of future industries projected by the State and the Union Governments.

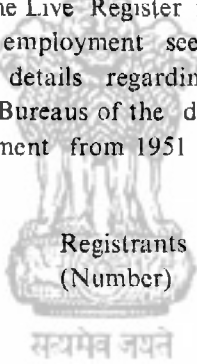
EMPLOYMENT SITUATION

The economy of Haryana is denominated by agriculture with 82.85 per cent of the population (according to 1961 Census) living in rural areas. Full employment can become possible only after a considerable period of development in the conventional (agriculture) sector together with a well defined policy of diversion of surplus man-power from agriculture to industry. According to the 1961 Census, of the total 14.9 lakh persons only 5.09 lakhs formed the work force (33 % approximately) of which 3.4 lakhs were engaged in the conventional sector, viz. agriculture, and the remaining were engaged in other pursuits, i.e. mining and quarrying, household industry, manufacturing, construction, trade and commerce, transport, storage and communication and in other un-identified services.¹ The following table provides a broad idea of the involvement of working population in different categories of professions other than cultivation according to the 1961 Census :—

Category	According to 1961 Census		
	Total	Rural	Urban
Professional, technical and related workers	10,182	4,573	5,009
Administrative, Executive and Managerial workers	6,540	3,137	3,403
Clerical and related workers	5,646	1,561	4,085
Sales workers	25,899	12,396	13,503
Farmers, fishermen, hunters, loggers and related workers	11,016	9,864	1,152
Miners, quarrymen and related workers	219	146	73
Workers in transport and communication occupations	4,734	1,725	3,009
Craftsmen, production process workers and labourers, not elsewhere classified	84,281	56,994	27,287
Service, sport and recreation workers	17,173	11,600	5,573
Workers not classifiable by occupations	359	337	22

1. Already given at pages 243-44.

In the absence of any regular survey relating to the assessment of employment opportunities created in the meanwhile and also of the data collected in the 1971 Census, it is difficult to establish any trends of employment more especially, in the rural sector because of its diverse character. However, the Market Employment Service and National Employment Service provide regular sources of employment information regarding the urban areas. The information collected under these services suffers from a number of limitations, the major being its limited coverage relating only to a segment of the economy. These services also do not cover agricultural sector, self-employed persons, household establishments, defence forces and establishments in the private sector. However, partial data available from the Employment Bureaus can provide a broad idea of the employment market in the urban sector. From the figures available from the Employment Bureaus functioning in the district,¹ it has been observed that whereas the number of applicants on the Live Register is continuously on the increase, the actual placement for the employment seekers has been comparatively insignificant. The following details regarding the number of registrations made with the Employment Bureaus of the district vis-a-vis the number of applicants placed in employment from 1951 to 1969 will substantiate the above observation :—



Year	Registrants (Number)	Applicants placed in employment (Number)	Percentage of column 3 to column 2
(1)	(2)	(3)	(4)
1951	3,700	1,104	29.8
1952	5,660	1,875	33.1
1953	4,189	578	13.8
1954	7,623	3,087	40.5
1955	10,739	3,288	30.6
1956	9,943	2,422	24.3

1. A sub-regional employment exchange was started at Karnal in September 1947. Later on a sub-office was established at Panipat in 1948.

1	2	3	4
1957	6,396	1,664	26.0
1958	9,644	2,250	23.3
1959	9,339	1,807	19.3
1960	10,077	1,430	14.2
1961	13,198	3,913	29.6
1962	14,469	3,026	20.9
1963	15,002	3,527	23.5
1964	18,368	3,954	21.5
1965	16,795	3,344	19.9
1966	17,922	3,564	19.9
1967	18,375	3,549	19.3
1968	21,024	5,014	23.8
1969	19,523	3,406	17.9

It is paradoxical that employment situation in the country has been steadily deteriorating although new development schemes have created appreciable employment opportunities. In this context district Karnal does not appear to be an exception. A single factor responsible for large-scale unemployment despite the implementation of stupendous development programme may be the population pressure. Although the Family Planning Programme has been launched in a big way, yet it is not expected that the public action for family planning and other contributory factors will influence fertility so soon. It is assumed that from 1981 onwards fertility shall decline linearly over the following 30 years to half of its current level of population growth. The increase in employment in the district in the industrial sector is not so rapid as to meet the pressure of increased population on land as the following table shows :—

Year	Population (Approximate- ly)	Number of working factories registered under the Factories Act	Estimated number of workers em- ployed in registered working factories	Percentage of in- dustrial workers to total population
1965-66	17,13,700	212	5,350	0.31
1966-67	17,66,691	221	4,981	0.28
1967-68	18,21,807	204	4,948	0.27
1968-69	18,78,474	209	4,849	0.25
1969-70	19,38,009	221	4,767	0.24

It would be observed from the above table that the percentage of industrial workers employed in the registered working factories to total population is even less than 0.5 %. The pressure on land will be reduced as elsewhere when industrial growth increases and the Family Planning Programme gets well under way.

PRICES AND WAGES

PRICES

The importance of the study of prices and price movements cannot be exaggerated for prices form the fulcrum around which the entire economic activity revolves. The prices of commodities and services are an expression in monetary form of their individual and relative values.

The Economic and Statistical Organisation, Haryana, collects the data on wholesale prices for a large number of agricultural commodities from all the market committees of the Karnal district. The data are published in the 'Monthly Wholesale Price Bulletin of Haryana'.

The following table shows the average annual wholesale prices of various agricultural commodities in the district during the sixties. These are the average of 52 weeks of the year and for all the market committees of the district :—

Commodity	(Rs. per quintal)					
	1960-61	1965-66	1966-67	1967-68	1968-69	1969-70
	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
Wheat (Dara)	37.47	62.88	94.21	80.86	86.62	86.96
<i>Jowar</i>	29.12	58.07	60.28	57.38	43.53	58.24
<i>Bajra</i>	37.21	63.89	74.54	67.64	71.17	69.93
Barley	28.19	59.67	81.75	73.19	46.46	57.40
Maize	33.34	40.62	74.88	71.41	62.68	55.45
Gram	34.80	71.76	96.31	90.72	82.61	103.49
Groundnut	..	101.50	138.17	110.22	119.93	..
<i>Gur</i>	34.27	42.36	85.33	170.07	143.15	62.33
Potatoes	20.85	27.70	51.91	54.29	35.22	46.85
Cotton (Desi)	89.15	108.86	113.58	118.12	130.61	134.48
Cotton (American)	100.47	126.48	142.82	142.69	142.02	163.20

The prices of agricultural commodities continuously rose from 1960-61 and reached the maximum level in 1966-67. Thereafter the prices decreased in 1967-68 excepting in the case of *gur*, potatoes and cotton.

As regards individual commodities, the price of wheat rose from Rs. 37.47 per quintal in 1960-61 to Rs. 94.21 in 1966-67. It decreased in the subsequent year but again rose in 1968-69. Almost similar trend was observed in *jowar*, *bajra*, barley, maize, gram, groundnut, cotton and potatoes. The price of *gur* had doubled in 1967-68 (Rs. 170.07 per quintal) as compared to Rs. 85.33 in 1966-67. Thereafter it declined to Rs. 143.15 in 1968-69 and further to Rs. 62.33 in 1969-70, showing a fall of 60 per cent.



The following table shows the harvest prices which prevailed in the district from 1960-61 to 1969-70 :—

Commodity	1960-61	1961-62	1962-63	1963-64	1965-66	1966-67	1967-68	1968-69	1969-70
	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
Wheat (Data)	39.52	38.58	39.20	48.60	65.45	94.04	74.22	85.00	79.00
Jowar	27.81	36.44	27.70	33.00	50.94	84.67	57.22	68.00	56.30
Bajra	35.82	37.51	32.60	41.50	51.58	78.58	57.22	68.00	68.40
Barley	28.80	28.93	32.40	39.40	59.65	89.49	50.27	55.00	58.20
Gram	34.16	36.97	38.00	49.60	70.95	109.80	65.18	98.22	95.05
Maize	32.15	34.83	32.20	40.80	48.30	72.25	59.00	66.55	64.45
Sugar (raw)	50.90	52.51	57.00	90.20	52.57	113.50	180.40	85.00	77.20
Sesamum (oil)	75.02	86.81	69.00	88.25	163.99	190.00	160.14	162.22	186.00
Groundnut	—	63.76	69.00	53.00	103.74	130.00	111.66	117.22	137.60
Rape	62.96	69.66	65.40	89.80	158.75	162.63	122.64	154.45	133.00
Mustard	—	—	—	87.20	105.42	135.91	102.40	133.33	146.00
Linseed	60.28	61.62	50.38	80.00	103.00	161.11	150.12	125.00	170.00
Toria	56.93	68.59	61.80	81.60	150.12	160.00	114.15	155.55	146.00
Tobacco	194.24	182.19	200.00	105.00	158.50	264.69	301.66	310.55	305.00
Cotton Desi (Unginned)	68.00	72.87	56.70	58.60	110.30	115.50	110.15	125.00	140.50
Cotton American (Unginned)	76.36	88.41	76.80	73.00	125.95	130.50	128.80	135.55	152.84

1. The harvest prices are the average wholesale prices at which the commodities are sold by the producer in the villages during the harvesting period.

The above table shows that harvest prices like the wholesale prices, also followed a similar trend. The prices kept on increasing and reached the highest level during 1966-67 and thereafter eased to some extent.

There is a time lag between the movement of wholesale and retail prices. The reaction of the wholesale prices is quicker than that of retail prices. It is because the market information regarding the movement of prices flows down to the retailer comparatively at a slow pace. The following table shows the average annual retail prices¹ of important commodities from 1964 to 1969 which prevailed at the district headquarters town of Karnal :—

Commodity	(Rs. per kilogram)					
	1964	1965	1966	1967	1968	1969
	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
Wheat (Dara)	0.55	0.61	0.73	0.99	0.76	0.84
Wheat Atta	0.63	0.66	0.77	1.09	0.81	0.92
Rice Coarse	0.70	0.63	0.64	0.92	1.00	0.72
Maize Atta	0.51	0.59	0.61	1.03	1.01	0.76
Moong Whole	1.10	1.23	1.35	1.83	1.63	1.53
Mash Whole	0.93	0.95	1.28	1.92	1.76	1.48
Gram Whole	0.62	0.58	0.74	1.03	0.87	1.04
Massar Whole	0.94	1.17	1.18	1.52	1.46	1.21
Desi Ghee	7.86	9.44	10.57	12.31	12.82	13.37
Vanaspati Ghee (2 kilogram)	8.20	8.82	11.70	11.68	9.96	11.69
Tea Lipton (500 gram)	6.25	6.33	6.68	6.88	7.44	7.49
Milk	0.72	0.81	0.90	1.08	1.34	1.37
Potato	0.59	0.48	0.50	0.78	0.60	0.45
Onion	0.30	0.36	0.40	0.38	0.59	0.52
Gur	1.08	0.73	0.66	1.89	2.21	1.19
Soft Coke (40 kg)	3.58	3.69	3.87	4.25	5.93	6.07
Kerosene Oil (per litre)	0.44	0.46	0.56	0.54	0.56	0.62
Firewood (40 kg)	3.91	4.01	4.88	5.25	5.96	6.99

1. The annual prices are the average of weekly prices during the year.

The above table reveals that the average retail prices like wholesale prices also rose considerably. Wheat price increased from 55 paise per kilogram in 1964 to 99 paise per kilogram in 1967 and thereafter it declined to 84 paise in 1969. The prices of other commodities also moved in a similar way.

The Economic and Statistical Organisation started compiling monthly cost of living index numbers for working classes from the year 1956-57, in respect of important industrial towns in the State. Panipat was one of them. The relevant data regarding cost of living index numbers are given below, yearwise, from 1956-57 to 1966-67. Thereafter the series was discontinued. These index numbers are based on the weekly retail prices that prevailed in Panipat town in respect of 101 commodities/services which were mostly consumed by the working classes :

(Base 1950-51 : 100)		
Year	Food	General
1956-57	92	97
1957-58	94	99
1958-59	104	109
1959-60	106	111
1960-61	103	113
1961-62	105	118
1962-63	107	120
1963-64	118	130
1964-65	142	145
1965-66	141	148
1966-67	186	181

The above table indicates that the price level during the years 1956-57 and 1957-58 was lower than that of 1950-51, the base year. From 1958-59 the prices rose continuously till 1966-67. In 1958-59 the rise was over 9 per cent but it was moderate in 1959-60 to 1962-63. Again in 1963-64, it rose by 8 per cent and in 1964-65 by 12 per cent. But

fortunately the prices rose by only 2 per cent in 1965-66. The price rise was, however, tremendous in 1966-67 when in a single year it rose by 22 per cent beating all the previous ten-year record. During the period of sixteen years from 1950-51 to 1966-67, the price level had increased by 81 per cent in Panipat. This state of affairs was not, however, peculiar to Panipat alone. During the same period, in other parts of the State, the prices had risen by 99 per cent in Bhiwani¹ (Hisar district), 114 per cent in Rewari² (Gurgaon district) and 100 per cent in Ambala Cantt. (Ambala district). The position in the country as a whole, was almost similar. The all-India working class cost of living index number was 191 in 1966-67 with 1949 as the base.

The economy of the Karnal district or any other part of the State is not a closed one. The price movement and the price policy in the country have, therefore, affected the price level in the district. The following are some important reasons which have led to increase in the prices in the country:

- (i) Expansion in the money supply from Rs. 2,868.81 crores in 1960-61 to Rs. 4,529.39 crores in 1965-66 and further to Rs. 6,353.65 crores in 1969-70.
- (ii) Heavy investments on projects with long gestation period.
- (iii) Great increase in population and consequent greater demand for consumer goods than their supply.
- (iv) Chinese aggression in 1962-63 followed by Indo-Pak conflict in 1965 and thereafter the prevalence of drought conditions and industrial recession.
- (v) Devaluation of Indian currency.
- (vi) Artificial scarcity created by hoarders.
- (vii) Existence of black money.

WAGES

Due to rising trend in prices, the wage level in the district also showed an upward trend during the last six decades. The tendency of wages to keep pace with prices has been more persisting during the 1961—70 decade, whereas previously the wage level generally lagged behind the price level. The average daily wage rates of skilled and unskilled workers which prevailed in the

1. Now in the Bhiwani district since December 22, 1972.

2. Now in the Mahendragarh district since December 22, 1972.

district from 1909 to 1959-60 are given below :

Year	Skilled	Percentage increase over 1909 level	Un-skilled	Percentage increase over 1909 level
	Rs. As. Ps.		Rs. As. Ps.	
1909	0.4.0	—	0.3.0	—
1912	0.5.0	25	0.4.0	33
1917	0.12.0	200	0.8.0	167
1922	1.0.0	300	0.8.0	167
1927	1.2.0	350	0.10.0	233
1932	0.12.0	200	0.6.0	100
1937	1.0.0	300	0.6.0	100
1943	2.2.0	750	..	..
1950-51	4.0.0	1,500	..	1,500
1951-52	4.0.0	1,500	1.13.0	867
1954-55	4.0.0	1,500	2.0.0	967
1955-56	3.0.0	1,100	2.0.0	967
1956-57	4.0.0	1,500	2.0.0	967
1957-58	4.0.0	1,500	2.0.0	967
1958-59	4.0.0	1,500	2.0.0	967
1959-60	5.0.0	1,900	2.0.0	967

In 1909, a skilled worker in the district earned four annas and an unskilled worker three annas a day. In 1927, it rose to Rs. 1.2.0 for the former and to 10 annas for the latter. In 1932, it came down to 12 annas and 6 annas respectively due to the great depression. Thereafter the rising trend started. During the fifties, the wages were stabilized at Rs. 4 per day for a skilled worker and Rs. 2 for an unskilled worker. The year 1955-56 was the only exception when a skilled worker earned a lower wage of Rs. 3

per day. In 1959-60, the wage rate for skilled labourer went up to Rs. 5 per day but in the case of unskilled worker it remained at Rs. 2, the same as in 1954-55.

Wages for farm labourers are mostly determined by prevalent customs and conventions. Besides, the law of supply and demand plays its part in determining the wages. During the busy season, the wages are high, while during the slack season, labour can be hired at lower wages. The agricultural labour wages per day in the Karnal district during the sixties were as follows :—

(For men only)

Year	Plough- ing	Sowing	Weed- ing	Har- vesting	Pick- ing of cotton	Other agri- cultural opera- tion	Black- smith	Carp- enter
	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
1960-61	2.00	1.50	1.40	—	—	2.00	5.00	5.00
1965-66	2.45	2.45	2.56	—	—	2.44	5.75	5.75
1966-67	2.50	2.50	2.50	5.00	—	2.50	5.78	5.87
1967-68	4.41	4.08	3.00	4.54	3.00	3.36	6.82	6.82
1968-69	5.50	4.50	3.13	5.59	3.44	4.20	9.09	9.09
1969-70	6.75	6.50	4.25	7.34	3.97	5.70	10.00	10.00
1970-71	6.48	6.24	5.28	7.23	4.58	5.91	9.73	9.74

[(1) The wage rates are in respect of village Ugra Kheri, a representative village.

(2) The wages are the average of 12 months.

(3) The wage rates are for a normal working day of eight hours.

(4) The wages include payment in cash and cash equivalent of commodities paid in kind.]

The above table shows that the wages kept on increasing from 1960-61 onwards in respect of all agricultural operations and also for skilled workers like blacksmith and carpenter. The wages were more than treble in 1970-71

as compared to 1960-61 for ploughing and weeding, four times for sowing and about three times for other agricultural operations. In the case of skilled workers the wages had only doubled during the decade as compared to the wages of unskilled labour which had risen by three to four times approximately.

COMMUNITY DEVELOPMENT

The Community Development was conceived, planned and initiated as an aided self-help programme for the individuals and for the collective welfare of the vast rural population. The object was to inculcate a sense of self-reliance in the individuals, to create an initiative drive in the village community and to generate and develop collective thinking and combined action.

This programme has to play a significant role with its focus on developmental activities in the rural areas. The major responsibility for both social progress and economic development is to be shouldered by the Government (Development and Panchayat Departments). The emphasis is on agriculture which is the mainstay of the people; but other aspects of life namely, health, sanitation, housing, education, recreation, rural arts and crafts, etc., also occupy an important place in this programme.

A block has been recognized as a unit of planning and development. Every tahsil has been divided into three to four blocks which have to pass through various phases, viz. Pre-extension phase of one year, Stage I of 5 years and Stage II of another 5 years after which every block passes through a Post-Stage II phase. During the Pre-Extension phase, the work is confined to preliminary surveys and planning and agricultural development. During Stage I of 5 years, every block is provided with funds to the tune of Rs. 12 lakhs to be spent on various developmental activities. During Stage II, every block is given Rs. 5 lakhs for 5 years to continue the intensive development programme of the first stage. During these two stages, a major portion of the funds is shared by the Government of India. In Post-Stage II, the entire burden is borne by the State Government. The block budget is not rigid and is intended to serve more as a guide for chalking out the programmes based on the desires and aspirations of the local people and their requirements. Besides, the Panchayat Samiti of the block has its own sources of income, e.g. professional tax, cycle license fees, income from ferries and cattle ponds, income from cattle fairs,¹ etc. This

1. The organisation of cattle fairs in the State has been taken over by the Government since November 1970.

money also is utilized for developmental activities. The departments concerned with the developmental activities (Agriculture, Animal Husbandry, Fisheries, Education, etc.) place some funds at the disposal of the Panchayat Smiti.

In Haryana, the Karnal district has the right claim to be one of the originators of Community Development Programme for the Pilot Project intended at Nilu Kheri (Nilo Kheri) in 1952 ushered the Community Development Programme in India in a big way. The district has, at present, 15 blocks¹ which are in Stage II and Post-Stage II as shown below;

Stage II	Post-Stage II
Kaithal	Thanesar
Madlauda	Nilu Kheri (Nilo Kheri)
Rajaund	Gula (Guhla)
Nisang	Panipat
Samalkha	Ladwa
Asandh	Gharaunda
	Shahabad (Shahbad)
	Pundri
	Karnal

Although self-help implies an awareness of a problem, a desire to change, a capacity to analyse problems and experience in weighing alternative solutions, these kinds of changes that are attitudinal and value-oriented come only from continued and sustained efforts. At the same time, it was a completely new idea for the people to think of governmental funds budgeted for the community block as being resources to help the people solve their problems. Anyhow, it is as yet difficult to analyse and evaluate the results of Community Development Programme since no fool-proof methods for testing its performance have been developed. Nevertheless the people have been motivated to implement programmes of development and the pace of their participation has been accelerated,

The number of *panchayats*, villages and population covered in each block is given in Table XXXI of Appendix.

COMMUNITY DEVELOPMENT TRAINING

Community Development Programme is an important adjunct of scholastic education. Through its demonstrative and practical approach to the

1. The following blocks are now in the Kurukshetra district : Kaithal, Thanesar, Gula(Guhla), Ladwa, Shahabad (Shahbad) and Pundri.

problems of good training and efficient work, it seeks to bring about social and economic regeneration in rural areas through the agencies of National Extension Service. In order to train various functionaries of the Programme, three institutions, viz. State Community Development Training Centre, Extension Education Institute and Integrated Training Centre for Extension Officers (Industries) were started at Nilu Kheri (Nilo Kheri) which has the privilege of being the first community development block in the country.

The State Community Development Training Centre, Nilu Kheri (Nilo Kheri).¹—A Social Education Organisers' Training Centre was established at Nilu kheri (Nilo Kheri) in April 1953, to impart job training to Social Education Organisers. The following year Block Development Officers' Training Centre was also established. These centres catered to the needs of all States in the northern and central regions of the country. In September 1958, the name of Development Officers' Training Centre was changed to Orientation and Study Centre. In April 1962, the Social Education Organisers Training Centre and the Orientation and Study Centre were amalgamated with two separate wings; orientation wing and social education wing. The institute functioned under the Government of India till March 1967, when it was transferred to the Government of Haryana and its name changed to State Community Development Training Centre.

The institute provides a 2 weeks' general course for Block Development Officers, Extension Officers, District Level Officers and non-officials and a 12 weeks' job course for Block Development Officers. The social education wing of the institute provides a 6 months' job courses for Social Education Organisers, a 6 weeks' refresher course for Social Education Organisers and a 4 weeks' orientation course for teacher-educators of junior basic teachers training institute.

Extension Education Institute, Nilu Kheri (Nilo Kheri).—In view of the growing need to train well-qualified multipurpose Village Level Workers, it was thought that the teachers of the Integrated Extension Training Centres should also develop greater skill in producing efficient Village Level Workers. In order to help these teachers to develop methods and techniques for improving the standard of teaching, this institute for applied learning was started in September 1959.

During the course of training, emphasis is laid on high quality, scholastic performance and effective methods of instruction. Special stress

1. In 1969, the training centre was shifted to Hisar.

is laid on the demonstration of team work and all-round co-operation between the staff and the students.

By March 1970, the institution conducted 23 courses for Principals and Instructors of Gramsevak/Gramsevika Training Centres ; 13 Integrated Courses for Extension Officers (Agriculture & Animal Husbandry) ; 44 Refresher Courses for Senior Village Level Workers ; 13 Village Artisan Courses for Agricultural Implements ; and 13 other courses. The duration of these Courses and the number of participants are given in Table XXXII of Appendix.

Integrated Training Centre for Extension Officers (Industries), Nilu Kheri (Nilo Kheri).—The Khadi and Village Industries Commission started a Khadi Gramodyog Vidyalaya for training of Extension Officers (Industries) in 1956. In April 1965, the Government of India took over Khadi Gramodyog Vidyalaya and established an Integrated Training Centre. It is one of the two centres set up in the whole country for the training of Extension Officers (Industries) of the community development blocks. It provides 12 months' integrated training in village and small-scale industries. Various State Governments depute their trainee officers to this centre. The syllabus of the course has been devised to train the Extension Officers to work for the promotion, organisation and extension of industries (cottage, village and small-scale) in rural areas.

The centre also arranges a short-term refresher course for those Extension Officers (Industries) who had undergone such a training in Khadi Gramodyog Vidyalaya or Small Industries Service Institutes and are working on rural industrial development programmes to acquaint themselves with the changing pattern of industries, and the technological changes in the village and small-scale industries which tend to increase rural incomes and productivity and create employment. The number of persons who completed training in integrated and refresher courses at this centre up to March 31, 1970 was 276 and 111 respectively.



सत्यमेव जयते

Chapter X

GENERAL ADMINISTRATION

ADMINISTRATIVE DIVISION

In 1969, the Karnal district as an administrative unit¹ consisted of five tahsils namely ; Karnal, Panipat, Thanesar, Kaithal and Gula (Guhla)². There were 11 towns and 1,429 villages (1,357 inhabited and 72 un-inhabited)³. The number of towns, villages⁴ and police stations in each tahsil was as follows :—

Tahsil	Towns	Villages			Police Stations	Police Posts
		In-habi- ted	Un- inhabi- ted	Total		
Karnal	3 [Karnal, Gharaunda and Nilu Kheri (Nilo Kheri)]	400	24	424	6 (Sadar Karnal, City Karnal, Gharaunda, Nisang, Bhutana and Indri)	1 Nilu Kheri (Nilo Kheri) (Permanent)

1. (i) The Karnal district has been bifurcated on January 23, 1972, and the new district of Kurukshetra comprising the tahsils of Thanesar, Gula (Guhla) and Kaithal, has been carved out of it. In this adjustment, 77 villages, formerly in the Kaithal tahsil, have been shifted to the adjoining areas, viz. 22 to the Karnal tahsil of the Karnal district; 44 of the Jind tahsil, 5 to the Safidon tahsil and 6 to the Narwana tahsil of the Jind district.

- (ii) For historical background to the administrative set-up, Chapter I may be referred.

2. Gula (Guhla), earlier a sub-tahsil of Kaithal, was raised to the status of a tahsil on August 13, 1968.

3. According to the 1961 Census, the total number of villages in the Karnal district was 1,415 (1,350 inhabited and 65 uninhabited). For other details footnote 3 on page 56 may be referred.

4. A village refers to an area for which a separate record of rights is maintained, or which has been separately assessed to land revenue, or would have been so assessed if the land revenue had not been realised or compounded or redeemed, or which the State Government had otherwise declared as an 'estate'. This definition of village is identical with that of *mauza* under section 3(1) of the Punjab Land Revenue Act, 1887. The definition applies to a demarcated area of land and not to a residential site.

Tahsil	Towns	Villages			Police Stations	Police Posts
		In-habi- ted	Un- inhabi- ted	Total		
Panipat	1 (Panipat)	169	16	185	4 (Sadar Panipat, City Panipat, Samalkha and Urlana)	1 Naultha (Permanent)
Thanesar	4 [Thanesar, Shahabad (Shahbad), Ladwa and Radaur]	414	15	429	5 [Sadar Thanesar, Sadar Shahabad (Shahbad), Ladwa, Radaur and Thaska Miranji]	4 Thanesar (Permanent) Shahabad (Shahbad) (Permanent) Pipli (Temporary) Kurukshetra University (Temporary)
Kaithal	2 (Kaithal and Pundri)	207	13	220	5 (Sadar Kaithal, City Kaithal, Pundri, Rajaund and Asan,th)	2 Pundri (Permanent) Chika (Temporary)
Gula (Guhla)	1 (Pehowa)	167	4	171	2 [Gula (Guhla) and Pehowa]	—
Total :	11	1,357	72	1,429	22	8

On the principle of decentralization of authority in the administrative set up, the district is divided into sub-divisions, each coinciding a tahsil area¹. The object is to promote efficiency in administration and to ensure better supervision over public affairs through decentralization of powers. Kaithal sub-division was created in 1896 while the remaining three sub-divisions were created in the post-Independence period, viz. Panipat in 1955, Thanesar in 1960 and Karnal in 1964. The sub-division at Karnal was abolished in March 1967 but revived in August 1968.

1. Of the five tahsils, Gula (Guhla) was the only one where a sub-division had not been created. It was under the Sub-Divisional Officer, Kaithal.

The strength of sub-division and tahsil officers in 1969-70 was as follows:—

Tahsil	Officers	Strength
Karnal	Sub-Divisional Officer (Civil)	1
	Tahsildar	1
	Naib Tahsildars	2
Panipat	Sub-Divisional Officer (Civil)	1
	Tahsildar	1
	Naib Tahsildars	2
Thanesar	Sub-Divisional Officer (Civil)	1
	Tahsildar	1
	Naib Tahsildars	2
Kaithal	Sub-Divisional Officer (Civil)	1
	Tahsildar	1
	Naib Tahsildars	2
Gula (Guhla)	Tahsildar	1
	Naib Tahsildar	1

In addition, there were 4 Naib Tahsildars (Agrarian)-one each for Karnal, Panipat and Thanesar and one for Kaithal and Gula (Guhla), one Naib Tahsildar for Low Income Group and Middle Income Group Housing Loans and one Naib Tahsildar for Land Development Schemes.

DISTRICT AUTHORITIES

Deputy Commissioner.—The general administration of the district is vested in the Deputy Commissioner, who for administrative purposes, is under the Commissioner, Ambala Division, Ambala. In other words, the State Government's general authority descends through the Divisional Commissioner to the Deputy Commissioner, who performs a triple function. He is at once the Deputy Commissioner, the District Magistrate and the Collector. As Deputy Commissioner, he is the executive head of the district with multifarious responsibilities relating to development, *panchayats*, local bodies, civil administration, etc. He has a special role to play in regard to Panchayati Raj. In addition to keeping an eye on the working of Panchayati Raj institutions, he also guides the *panchayats*, Panchayat Samitis and Zila Parishad¹ in dealing with their problems and overcoming their difficulties.

1. The institution of Zila Parishad has been abolished since June 13, 1973,

As District Magistrate, he is responsible for law and order and heads the police and prosecuting agency. As Collector, he is the chief officer of the revenue administration and is responsible for collection of land revenue and all dues recoverable as arrears of land revenue, and is also the highest revenue judicial authority in the district. He acts as the District Elections Officer and the Registrar for registration work. He exercises over-all responsibility on other Government agencies in his district. While he co-ordinates their activities wherever necessary, he does not interfere in their internal administration and the procedures, methods and policies of their departments. He is, in short, the head of the district administration, a co-ordinating officer among various departments and a connecting link between the public and the Government insofar as he executes the policies, administers the rules and regulations framed by the Government from time to time, and also looks after the welfare, needs and requirements of the people.

Sub-Divisional Officer.—The Sub-Divisional Officer is the general designation of the chief civil officer of the sub-division. In fact, he is a miniature Deputy Commissioner of his sub-division. He possesses adequate powers to co-ordinate work in the sub-division. He exercises direct control over the Tahsildars and their staff. He is competent to correspond direct with Government and departments at the district level on routine matters. His main duties, like those of the Deputy Commissioner, include revenue, executive and judicial work. In revenue matters the powers of Collector have been delegated to him. His executive duties pertain to the maintenance of law and order, development, local bodies, motor taxation, passport, renewal of arms licenses, sub-divisional establishment, etc. As Sub-Divisional Magistrate, he exercises certain judicial powers under certain sections of the preventive chapters of Criminal Procedure Code. Appeal from the orders of the Sub-Divisional Magistrate in such cases lies with the District and Sessions Judge.

Tahsildar/Naib Tahsildar.—The Tahsildar and Naib Tahsildar are Assistant Collectors II Grade. While deciding partition cases, the Tahsildar assumes the powers of Assistant Collector I Grade. Their main task being revenue collection, the Tahsildar and Naib Tahsildar have to tour extensively in their areas. The revenue record and the crop statistics are also maintained by them. They assist the development staff in their various activities like execution of development plans, construction of roads, drains, embankments, soil conservation and reclamation, pavement of streets, filling of depressions and disposing of work connected with rural reconstruction. They help the Block Development and Panchayat Officers in

enlisting the maximum co-operation of the people in rural areas to make the Panchayati Raj a success.

Tahsildars and Naib Tahsildars in the district are assisted by the following revenue staff :—

Staff	Strength
Sadar Kanungo ¹	1
Office Kanungos	5
Field Kanungos	17
Patwaris	339
Assistant Patwaris	4

The actual preparation of village records and revenue statistics rests with the Patwaris; hence division of the district into 339 *Patwar* circles, each circle being looked after by a Patwari who works under the immediate supervision of the Field Kanungo² concerned.

The Lambardar is another important functionary in the administration. He is responsible for the collection of land revenue. Revenue deposits were previously made in the Government treasury under the charge of the tahsil officers. These are now made in the State Bank of India at Karnal and its subsidiary branches at Kaithal, Panipat and Thanesar. In addition to his duties of land revenue collection, the Lambardar looks after law and order in his area and any breach thereof is reported by him to the nearest police station and to the Deputy Commissioner's agency. He is assisted in his work by the village chowkidar. The Lambardar is paid *pachotra* at the rate of 5 per cent of the land revenue.

DEVELOPMENT ORGANISATION

To administer the numerous schemes of development, the district has been divided into 15 Blocks, each being a consolidated unit comprising rural population of about 68,000.³ The Block was previously under the

1. He is in charge of the district headquarters record room and exercises general supervision over the maintenance of revenue records.

2. The work of checking statistics prepared by the revenue agency is now-a-days done by the District Statistical Officer.

3. For details see Chapter on 'Economic Trends'.

charge of a Block Development Officer but with the merger of the Panchayat Department with the Development Department, the Block Development Officer has been re-designated as the Block Development and Panchayat Officer and has been invested with powers of Panchayat Officer under the Punjab Gram Panchayat Act, 1952. With the introduction of the Panchayati Raj in 1961, the development of the Block is looked after by an elected body known as the Panchayat Samiti. The Block Development and Panchayat Officer functions under the administrative control of the Panchayat Samiti and is its *ex-officio* Executive Officer.

Each Block has been provided with Extension Officers from the Industries, Agriculture, Co-operative and Panchayat Departments who function under the control of the Block Development and Panchayat Officer. This arrangement helps to co-ordinate development activities in the Block.

The co-ordination of development works of various Panchayat Samitis is done by the Zila Parishad¹ at the district level.

Panchayats have been constituted at the village level. These mainly look after the development works. Their other functions include criminal, civil and revenue (judicial) work within specified limits.

GENERAL ARRANGEMENT FOR DISPOSAL OF BUSINESS

In addition to sub-division, tahsil and Block staff, the Deputy Commissioner is assisted by the General Assistant and the District Development and Panchayat Officer. The Assistant Commissioner/Extra Assistant Commissioners (under training) are temporarily appointed from time to time with varying degrees of powers—magisterial (executive) and revenue. These officers relieve him of the detailed and routine activities of his office and thus enable him to concentrate on his general managerial duties of co-ordination, direction, superintendence and control in all spheres of the district administrative functions.

General Assistant.—He is the principal administrative officer under the Deputy Commissioner and assists him in all executive and administrative functions. Not required to tour in the district, he stays at the headquarters to supervise the working of the office. He is competent to correspond with Government and other Departments on routine matters. All the branches in the Deputy Commissioner's Office except the Development Branch function through him. He is also required to function as the District Electoral Officer.

1. The institution of Zila Parishad has been abolished since June 13, 1973, and its functions have been assumed by the Government.

In addition to the above, the General Assistant attends to a lot of miscellaneous work as detailed below :

- (1) Complaints and enquiries received from public and Government.
- (2) Urban and rural rehabilitation work.
- (3) Work of occasional nature, *e.g.* arrangements in connection with the celebration of Independence day, Republic day, Vana Mahotsava, visits of V.I.P.s., District Relief Fund, etc.
- (4) Miscellaneous work, *e.g.* work of semi-official and non-official bodies, among others that of District Soldiers', Sailors' and Airmen's Board, District Red Cross Society, Bharat Scouts and Guides, District Sports Association, Home Guards, Civil Aviation and Local Bodies.
- (5) Flood relief work.
- (6) Arms and Motor Licensing, Civil Home Defence, Small Savings.
- (7) District Office establishment.

District Development and Panchayat Officer.—He is the Deputy Commissioner's principal officer who helps him to carry on the community development and welfare programmes. He deals with the following subjects :—

- (1) Work relating to development, five-year plans and local development works.
- (2) Zila Parishad, Panchayat Samitis and *Panchayats*.
- (3) Middle and Low Income Group Housing Schemes.

ELECTIONS

The conducting of General Elections to the Parliament and State legislature is supervised by the General Assistant who is also District Electoral Officer. Work relating to the conduct of municipal elections is done in the Local Fund Branch while that of Panches and Sarpanches in the Development Branch.

DISTRICT COMMITTEES

A number of committees/boards have been constituted to advise and help the administration to discharge its duties efficiently. These

committees normally work under the stewardship of the Deputy Commissioner but sometimes the Commissioner or a State Minister attends their meetings if the matter under consideration is of emergent importance. Whenever necessary, some non-officials are also associated with these committees to stimulate a co-operative response from the general public towards the working of various departments and the implementation of development schemes.

OTHER STATE AND CENTRAL GOVERNMENT OFFICERS

Other State and Central officers in the district are listed below. They are administratively under the control of their respective Heads of Department but the Deputy Commissioner has been given powers to co-ordinate their activities and exercise a general control over them. The long list given below emphasises the multifarious fields requiring the attention of the Deputy Commissioner :

STATE GOVERNMENT OFFICERS

1. Executive Engineer (P.W.D.), Public Health Division, Karnal
2. Superintending Engineer (B&R), Karnal Circle, Karnal
3. Executive Engineer, Karnal Division, Western Jumna (Yamuna) Canal, Karnal
4. Executive Engineer, Pehowa Division, Kaithal
5. Superintending Engineer, Drainage Circle, Karnal
6. Executive Engineer, Karnal Drainage Division, Karnal
7. Executive Engineer, Mechanical Drainage Division, Karnal
8. Executive Engineer, Investigation Drainage Division, Karnal
9. Executive Engineer, Tubewell Division, Karnal
10. Superintending Engineer, Haryana State Electricity Board, Karnal
11. Executive Engineer, Haryana State Electricity Board, Karnal City Division, Karnal
12. Executive Engineer, Haryana State Electricity Board, Suburban Division, Karnal
13. Executive Engineer, Haryana State Electricity Board, Operation Division, Kurukshetra

14. Executive Engineer, Haryana State Electricity Board, City Division, Panipat
15. Executive Engineer, Haryana State Electricity Board, Suburban Division, Panipat
16. Executive Engineer, Haryana State Electricity Board, Kaithal Division, Kaithal
17. Executive Engineer, Haryana State Electricity Board, Shahbad Division, Shahabad (Shahbad)
18. Chief Medical Officer, Karnal
19. Malaria Officer, Karnal
20. District Industries Officer, Panipat
21. District Education Officer, Karnal
22. District Food and Supplies Controller, Karnal
23. District Animal Husbandry Officer, Karnal
24. District Statistical Officer, Karnal
25. District Sports Officer, Karnal
26. District Language Officer, Karnal
27. Treasury Officer, Karnal
28. District Welfare Officer, Karnal
29. District Public Relations Officer, Karnal
30. District Employment Officer, Karnal
31. District Excise and Taxation Officer, Karnal
32. Superintendent, District Jail, Karnal
33. Deputy Registrar, Co-operative Societies, Karnal
34. Assistant Registrar, Co-operative Societies, Karnal
35. Assistant Registrar, Co-operative Societies, Kaithal
36. Assistant Warden, Fisheries, Karnal

37. Deputy Director, Agriculture (I.A.D.P.), Karnal
38. Divisional Forest Officer, Karnal
39. Land Reclamation Officer, Karnal
40. District Probation Officer, Karnal
41. Labour Officer-cum-Conciliation Officer, Karnal
42. Commandant, Home Guards, Karnal

The Inspectors dealing with weights and measures and shops also function in the district.

CENTRAL GOVERNMENT OFFICERS (EXCLUDING MILITARY OFFICERS)

1. Superintendent, Post Offices, Karnal
2. Sub-Divisional Officer (Telegraph), Karnal Sub-Division, Karnal
3. Income Tax Officers (3), Karnal
4. Director, National Dairy Research Institute, Karnal
5. Deputy Assistant Director General, Medical Store Depot, Karnal
6. Assistant Agricultural Officer, Research Sub-Station, Karnal
7. Executive Engineer (C.P.W.D.) Electrical, Karnal
8. Executive Engineer (C.P.W.D.) Construction, Karnal

POLICE

The police administration in the district is under the Superintendent of Police who, next to the Deputy Commissioner, is responsible for the maintenance of law and order. He functions under the administrative control of the Deputy Inspector General of Police, Ambala Range, Ambala Cantt.¹ In 1969-70, there were 22 police stations and 8 police posts in the district as detailed earlier.

JUDICIARY

Before the separation of the judiciary from the executive, the administration of civil justice in the district was headed by the District and Sessions Judge, Karnal, who was assisted by the Senior Sub-Judge, Karnal, and three Sub-Judges, one each at Karnal, Kaithal and Panipat. An additional

1. For more details about Police, refer to Chapter on 'Law and Order and Justice'.

Sub-Judge III Class was appointed at Karnal in 1965. The criminal justice was controlled by the District Magistrate, Karnal, who was assisted by Additional District Magistrate, Karnal, three Magistrates I Class at Karnal, General Assistant, Karnal, Sub-Divisional Officers (Civil) at Panipat, Kaithal and Thanesar, and Resident Magistrates at Panipat and Kaithal. After the separation in October 1964, criminal justice has also been placed under the control of the District and Sessions Judge, Karnal.¹ The District Magistrate is now responsible for law and order and Executive Magistrates under him try only security cases.

DISTRICT ATTORNEY

Prior to the appointment of a District Attorney in the Karnal district in 1961, the criminal business and civil business on behalf of the Government was done by the Public Prosecutor and Government Advocates respectively. Now the District Attorney conducts civil business in all the district courts and criminal business only in the courts of District and Sessions Judge and Additional District and Sessions Judge. He functions under the general control of the Legal Remembrancer and is not allowed any private practice. He is assisted by an Assistant District Attorney. With the appointment of an Additional Sessions Judge (II), Karnal, in March 1967, one more Assistant District Attorney (II) has been appointed.

OFFICIAL RECEIVER

There is an Official Receiver at Karnal appointed by Government on the recommendations of the District and Sessions Judge. He is in charge of the Insolvency Estates. In case a person applies for insolvency, his property is put under his charge and he disposes it of according to the orders of the Insolvency Court, keeping 7½ per cent of sale proceeds as his remuneration. He also acts as Court Auctioneer and gets 4 per cent commission on the auction proceeds.

OATH COMMISSIONERS

In 1969-70, there were 21 Oath Commissioners, 18 at Karnal including Official Receiver who was an *ex-officio* Oath Commissioner, and one each at Panipat, Kaithal and Thanesar. They charged Re.1 as attestation fee for each affidavit attested.

1. For more details about Judiciary, refer to Chapter on 'Law and Order and Justice'.

The Deputy Commissioner is the Registrar responsible for registration work in the district. Previously there were four Honorary Sub-Registrars, one in each tahsil [except Gula (Guhla)], but in 1964 this institution was abolished. Now the Tahsildar, and in his absence the Naib Tahsildar, performs the functions of Sub-Registrar.



Chapter XI

REVENUE ADMINISTRATION

HISTORY OF THE REVENUE ADMINISTRATION

Lying in the path of invaders from the north-west, the Karnal area did not know established government and steady civil order over long periods of its history. During the eighteenth century the southern part of the district was a no-man's land, seized sometimes by the Sikhs and sometimes by the Marathas and their adherents. "Revenue administration there was none; the cultivator followed the plough with a sword in his hand; the Collector came at the head of a regiment; and if he fared well, another soon followed him to pick up the crumbs."¹ The northern part of the district was parcelled out between a number of Sikh chieftains. Their revenue system consisted in squeezing the weak and getting as much as they could out of the strong.

When more settled conditions obtained in the early 19th century, the people who had taken shelter in larger villages, returned to their fields and hamlets, and those who had left the district altogether, gradually came back; but the habits which nearly a century of anarchy and confusion had engendered were not easily eradicated. The oppressive manner in which the British conducted their revenue administration merely delayed the process. For the first few years, revenue matters were practically in the hands of the people who had been assigned different parts of the district. But soon after, the British began to assess summarily the annual revenue to be paid by each village. By 1824, the process of summary settlement of the then Panipat district, except that of the tract assigned to Mandal family, was more or less complete. These summary settlements were extremely oppressive in well developed villages. Half the gross produce was assessed besides taxes on grazing and cattle. In the erstwhile Thanesar district which included Thanesar tahsil, Kaithal tahsil and Indri pargana, various component territories, as they escheated to the British were summarily settled. The assessment in these cases was also oppressive.

1. *Karnal District Gazetteer*, 1918, p. 144.

REGULAR SETTLEMENT

Regular revenue settlements were taken up in various parts of the district on different dates.¹ A detailed account of the first regular settlement and the first revised settlement is given in Ibbetson's *Settlement Report of the Panipat Tahsil and Karnal Parganah*, 1883, and Douie's *Settlement Report of Karnal-Ambala*, 1891.

The last regular settlement in the district sanctioned for 30 years was carried out between the years 1904-09 and came into force from *Kharif* 1909.

Each of the tahsils was divided into assessment circles roughly corresponding to their physical configuration:

Tahsil	Assessment Circles
(1)	(2)
Panipat	Panipat Khadar Bangar
Karnal	Khadar Karnal Bangar Karnal Nardak Karnal Khadar Indri Bangar Indri Nardak Indri
Thanesar	Khadar Bangar Bet Markanda Northern Chachra Southern Chachra

1. Territory	First Regular Settlement as sanctioned		First Revised Settlement as sanctioned		Second Revised Settlement as sanctioned	
	From	To	From	To	From	To
Panipat tahsil and part of Karnal tahsil	1842	1872	<i>Kharif</i> 1879	<i>Rabi</i> 1909	<i>Kharif</i> 1909	<i>Rabi</i> 1939
Mandal tract	1856					
Rest of the district (Indri, Kaithal tahsil and Thanesar tahsil)	1856	1879	<i>Kharif</i> 1886-88	<i>Rabi</i> 1906-08		

(1)	(2)
Kaithal	Nardak Bangar Kaithal Bangar Pehowa
Gula (Guhla) (Sub-tahsil) ¹	Naili Andarwar Powadh

Each assessment circle was further sub-divided according to qualities of soil and facilities for irrigation.

During Ibbetson's settlement conducted in 1872-1880, the village maps of Panipat tahsil and Karnal pargana were prepared by means of the plane-table. The unit of measurement employed was the *gatha* of 99 inches, and areas were recorded in the *pakka* or Shahjahani *bigha* which is three times the size of the ordinary *kachcha bigha* used by farmers in most parts of the district. The measurements during the settlement operations conducted by Douie in 1882-1889 in Indri pargana and the Kaithal and Thanesar tahsils were made on the square-system; the unit of measurement being the *karam* of 57 inches, and the area being recorded in *kachcha bighas*. Since there had been little extension of cultivation in a large portion of the district, re-measurement was dispensed with wherever feasible and the existing maps were corrected. Karnal pargana was re-measured on the square-system with the *kachcha bigha* as the unit of area in order to secure uniformity with the rest of the Karnal tahsil. In the Panipat tahsil, the old Shahjahani *bigha* was retained in revising the measurements, but as the area in the adjoining tahsils of the then Delhi district had been recorded in *kachcha bighas*, the settlement of Panipat was recorded in both *pakka* and *kachcha bighas*. Thus *kachcha bigha* was adopted as the unit of area for the whole district.

The standard of assessment was fixed by the Government at half the rental or net assets calculated on the basis of rents either in cash or produce paid by tenants-at-will to their landlords. Suitable assessment for the whole circle was made and the rates for each class of soil were also proposed. At the same time, to assist the distribution of revenue over villages, crop rates were devised on the basis of the rates given by the produce estimate. For the assessment of canal lands, the government ordered that the *nahri* (irrigated

1. Gula (Guhla) sub-tahsil was raised to the status of a tahsil on August 13, 1968.

from canal) rates sanctioned should be applied not to any average irrigated area but to the area recorded as *nahri* in the record-of-rights.

The following table shows the total results of the re-assessment. The demand actually announced is compared with the demand of the last year of the terminative settlement :—

Tahsil	Circle	Old fixed demand	Final new demand	Increase per cent of column 4 on column 3
(1)	(2)	(3)	(4)	(5)
		(Rs.)	(Rs.)	
Panipat	Panipat town	25,605	32,805	28
	Khadar	1,20,034	1,49,974	25
	Bangar	1,62,912	1,96,000	20
	Total tahsil :—	3,08,551	3,78,779	23
Karnal	Khadar Karnal	48,752	59,005	21
	Karnal town	8,093	13,000	51
	Bangar Karnal	32,747	42,600	30
	Nardak Karnal	33,662	53,212	58
	Khadar Indri	80,915	88,046	8
	Bangar Indri	49,875	55,315	11
	Nardak Indri	23,901	27,555	15
	Total tahsil :—	2,77,945	3,38,733	22
Thanesar	Khadar	27,400	31,035	13
	Bangar	41,068	42,674	4
	Bet Markanda	94,464	1,19,960	27

1	2	3	4	5
	North Chachra	51,070	64,994	27
	South Chachra	26,492	35,145	33
	Total tahsil :—	2,40,494	2,93,808	22
Kaithal (including Gula)	Nardak	53,756	1,14,225	112
	Bangar Kaithal	69,075	1,16,735	69
	Bangar Pehowa	12,067	15,480	28
	Naili	61,465	62,675	2
	Andarwar	16,234	16,630	2
	Powadh	28,368	32,070	13
	Total tahsil :—	2,40,965	3,57,815	49
	Total district :—	10,67,955	13,69,135	28

In villages where the increase was large, the whole demand was not imposed immediately. Part of the assessment was deferred for five and, in some cases, for ten years. The amount of assessment thus deferred, reduction on account of *muafis* (revenue free) and protective leases for wells and roadside trees are shown below :

Tahsil	Deferred assessment			Reduction on account of			Total
	Ist	2nd	Total	muafis	protective lease		
	five	five			for		
	years	years			wells	roadside trees	
	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
Panipat	7,796	3,225	11,021	..	1,374	30	12,425
Karnal	8,904	3,038	11,942	144	2,817	256	15,159
Kaithal (including Gula)	38,715	10,216	48,931	10	1,769	..	50,710
Thanesar	6,010	1,275	7,285	697	1,529	..	9,511
Total :	61,425	17,754	79,179	851	7,489	286	87,805

The date of payment of the revenue instalment for *rabi* was fixed 15th June for the whole district except Nardak and Bangar circles of the Kaithal tahsil where it was 15th July. For *kharif* instalment, it was fixed 15th December for the Kaithal tahsil (except Powadh circle), Bangar, Panipat, Nardak, Indri and three circles of Karnal pargana, and 15th January for the rest of the district.

THE WORKING OF THE SETTLEMENT, 1909

The settlement worked well for some time. In the thirties the district came into the grip of depression because of the drop in water-table by 7 to 8 feet in Andarwar circle and a part of Naili circle and the accentuation of water-logging after the construction of the Sirsa Branch of the Western Jumna (Yamuna) Canal. In 1936, the forecast report made out the district as an economically invalid, in the grip of depression and stagnancy, and thus the then Deputy Commissioner anticipated a reduction of about 25 per cent in the overall demand as compared with the demand fixed at the time of settlement of 1909. The circumstances changed thereafter. The prices began to rise in 1941 and rent rates increased exorbitantly.

The general physical features of the district have also undergone a change. The Chautang, the Saraswati and some of the other hill torrents and streams have been diverted to new courses resulting in a well-regulated diversion of inundation through inundation canals and bunds. Besides, the perennial supplies from the Narwana Branch of Ist Bhakra Main Line have removed the hardship of rotational closures of Western Jumna (Yamuna) Canal during *rabi* and thus secured the area against drought. There has thus been a significant increase in canal irrigation with salutary effect on the tract.

A considerable increase in the number of wells from 9,058 in 1909 to 16,190 in 1966-67 resulted in the extension of *chahi* irrigation from 1,49,091 to 15,87,576 acres. The cultivated area increased from 10,93,623 at settlement to 15,87,576 *i.e.* by 45.16 per cent (4,93,953 acres). The Government was very keen to reclaim the culturable waste to promote the Grow More Food Campaign and a scheme was devised under the East Punjab Utilization of Lands Act, 1949. As a result, the culturable waste land in the district which accounted for 174 thousand hectares in 1952-53, was reduced to 29 thousand hectares in 1966-67 and 17 thousand hectares in 1969-70.

The incidence of land revenue from 1952 to 1969 may be seen in Table XXXIII of Appendix.

SPECIAL ASSESSMENT ON LAND PUT TO NON-AGRICULTURAL USE

In the case of agricultural land, the return to the State is fixed under the land revenue settlements, having regard to factors such as soil, yields, prices, rainfall, rental statistics and economic conditions of the area. But when land is put to non-agricultural uses like constructing a residential building or erecting an industrial plant, the owner of the land gets an unearned increment particularly if the land is situated within or in the vicinity of growing towns and cities. This increment in land values can generally be attributed to the expenditure incurred out of public revenues in constructing roads and railways and general development of the area. The land-owners are not fully entitled to this increment in values and it is only fair that this increment should be shared with the Government. It was with this object that the Punjab Land Revenue Act of 1887 was amended by the Punjab Act XIII of 1952 which provided for special assessment of land "put to use different from that for which an assessment is in force or when the land has been put to use for non-agricultural purposes such as brick-kilns, factories, houses, landing grounds and other similar purposes". The work of special assessment of non-agricultural lands was started in July 1955.

Ad-hoc special assessment under Punjab Land Revenue Act No. 6 of 1956.—Since a very elaborate procedure was provided for carrying out the special assessment operations which were to take a number of years, it was decided to levy special assessment on *ad-hoc* basis as a multiple of the existing land revenue with effect from *kharif* 1955.

Punjab Land Revenue Act XIX of 1958.—While the work of special assessment was in progress a defect was observed in the Punjab Act XIII of 1952 in as much as it did not permit the levy of special assessment on land put to non-agricultural use if it was not already assessed to land revenue. In other words, the town sites escaped assessment. Accordingly, the Punjab Act XIX of 1958 was passed to provide assessment of lands except village *abadi deh* (inhabited site of village) whether or not already assessed to land revenue. Certain exemptions were also provided.

Section 48 of the Act XIX of 1958 provides that pitch of special assessment on a category and class of sites of land put to non-agricultural use in an assessment circle or part thereof shall not exceed $\frac{1}{4}$ th of the average net letting value ; or exceed 2—4 per cent of the average market value ; and in the case of sites lying vacant and out of use, exceed 1 per cent of the average market value,

The net letting value is derived after making the following deductions from the present annual rent of such sites :—

- (i) fair remuneration at 6 per cent for the capital invested on building or machinery or both after deducting the depreciation on their value ;
- (ii) house tax ;
- (iii) property tax ; and
- (iv) maintenance charges not exceeding one month's gross rent.

On publication of the preliminary assessment reports a number of representations were made to Government against harshness of the levy. Government, therefore, took the following decisions on April 4, 1961 :—

- (i) The rate of levy at present should not be up to the maximum limit of 25 per cent prescribed in the Punjab Land Revenue (Amendment) Act, 1958 ; it should not exceed $6\frac{1}{4}$ per cent of the estimated average net letting value. Where, however, this levy has to be made according to the market value, as provided in the Act, it should be modified also in the same proportion, as above.
- (ii) Exemption should be given to the following cases :—
 - (a) All hilly areas notified as such by Government.
 - (b) Sites on which new factories are built, for a period of 10 years (i.e. each factory will be exempted for 10 years from the start of working of the factory).
- (iii) Substantial relief should be given in the following cases :—
 - (a) Compound and courtyard areas surrounding the building and used for purposes such as flower-beds, kitchen garden, grassy lawns, fruit plants, etc.
 - (b) The owner-occupied residential houses and bungalows.

To give effect to the decision No. (iii), the following proposals were formulated and approved :—

- (i) The rate of levy on owner-occupied houses and bungalows shall be $\frac{1}{4}$ th of the rate otherwise leviable, i.e. if the building was rented,

- (ii) The rate of levy on compound and courtyard areas shall be $\frac{1}{4}$ th of the rate charged on the building itself.

Since the general rate of levy had already been reduced from 25 per cent to $6\frac{1}{4}$ per cent of the net letting value, the rate of owner-occupied houses and bungalows would come to $\frac{1}{16}$ th of the original rate, and in the case of compound and courtyard areas of owner-occupied houses/bungalows, it would come to $\frac{1}{64}$ th of the original rate.

In addition to exempting hill areas which term included sub-montane areas and factories (for a limited period of 10 years), the following exemptions were also provided :—

- (i) Use of land for purposes of a garden ;
- (ii) Use of land for purposes of an orchard ;
- (iii) Use of houses occupied for agricultural purposes or for purposes subservient to agriculture ;
- (iv) Use of land for small-scale cottage industries ;
- (v) Use of land for public, charitable or religious purposes ; and
- (vi) residential houses/bungalows in occupation of owners with an annual rental value not exceeding Rs. 300.

As already mentioned, the work of special assessment in the district was started in 1955. Special assessment in a district ordinarily lasts for a period of 10 years and remains in force till a new assessment is made. The work of special assessment in areas outside *lal lakir* (line to demarcate the inhabited site of village, not assessed to land revenue) was completed and the amount was realised until *kharif* 1964 when for various reasons it was suspended.

COLLECTION OF LAND REVENUE

Before the British, the revenue collection was the responsibility of the Lambardar and there used to be one headman for each *panna*. He had enormous authority. The distribution of revenue was wholly in the hands of the *thapa* and village council, of which he was the head. His office was hereditary, though fitness was an essential requisite, and the next heir would be passed over, if incapable, in favour of another member of the same family. When the British acquired the tract the same arrangement was per force continued for many years, as no record of individual rights or liabilities existed. But the hereditary nature of the office, and the authority

attached to it, were lost sight of. All the leading men of the village were admitted to sign the engagement for the revenue, and all who signed it, were called headmen. The allowance given to these men, took the form of a deduction from the last instalment of revenue if paid punctually, and was divided by all the engagers. In fact, it is even said that "all the owners shared it proportionally, and that it practically took the form of a mere abatement of revenue in which the whole community had a common interest."¹

The mode of collection was as vexatious and extortionate as the assessment was oppressive. The collections were made in February and September, long before the harvest, and the cultivator was thus 'forced to part with his grain at a ruinous sacrifice'. Guards were appointed to watch the crops in the interest of Government, but at the cost of the owner; and directly the revenue was overdue, horse and foot were quartered in the village at its own expense. A vivid description of the mode of collection in the beginning of the 19th century is given in the report of the Board of Revenue: "A pernicious practice prevails of overwhelming the villages with swarms of hired servants furnished with orders of demand for the instalments of the land revenue, without any regard to the means of the people, the state of the crops, the powers of the village, or the number of hired servants so employed. In this way native officers provide for hungry dependents; and men of every bad description, idle, lazy loiterers, are scattered over the land, and find employment in forbearing to realize the monies they are sent to collect."²

In 1830, a field-to-field record was introduced and an attempt was made to limit the number of headmen, it being ruled that people were to elect new headmen every year, who alone were to enjoy the allowance. This plan was not carried out in its entirety. At the settlement of 1842, the number of headmen was still inordinately excessive and the Settlement Officer was directed to reduce the numbers largely, taking as a general standard, one headman for every Rs. 1,000 of revenue. He found that among the crowd of so-called headmen, there were generally some who had enjoyed the office, either personally or through their ancestors, for a considerable period. These he selected; and, as far as possible, gave one headman at least to each sub-division of a village.

In Kaithal, the number of headmen recognised in the first settlement was excessive. In the settlement of 1856, the evil was met in many villages by a somewhat clumsy device of confirming existing holders in their

1. Denzil Charles Jelf Ibbetson, *Report on the Revision of Settlement of the Panipat Tahsil and Karnal Parganah of the Karnal District, 1872-80*, p. 93.

2. Ibid. p. 47.

appointment for life, and providing that the first one or two vacancies should not be filled up.

During the settlement of 1909, the arrangements were far from satisfactory, particularly in the Thanesar tahsil and the northern portion of the Kaithal tahsil where it was not uncommon to find 3 or 4 headmen in a village, the total revenue of which was less than Rs. 300. Efforts were, however, made for reducing the number of Lambardars where the amount of *pachotra* was not sufficient to induce them to carry out their duties. In other villages where owing to the extension of canal irrigation the *pachotra* of a Lambardar became generally sufficient for the justification of that number of headmen, the number was allowed to remain as such.

The *zaildari* system was introduced by Ibbetson at the settlement of the Panipat tahsil and Karnal pargana in 1872-1880. Shortly afterwards the system was extended to the rest of the district. No Zaildar was appointed in the Thanesar tahsil though the Inamdars who took their place practically corresponded to Zaildars in every thing but their remuneration. In 1904, there were 16 Zaildars in the Karnal tahsil, 7 in the Panipat tahsil and 15 in the Kaithal tahsil, and 14 Inamdars in the Thanesar tahsil. Their remuneration was very uneven. The Panipat Zaildars in some cases received as much as Rs. 700 per annum, while the Thanesar Inamdars had to be content with only Rs. 60. During the settlement of 1909, Zaildars were appointed throughout the district and were divided into three categories each receiving Rs. 300, Rs. 250 and Rs. 200 annually. The boundaries of *zails*, though primarily based on tribal distinctions, were slightly altered in order to make them correspond as far as possible with the boundaries of *thanas*.

Ibbetson during the settlement of 1879 appointed Ala Lambardars in the Panipat tahsil and Karnal pargana, but, barring a few exceptions, Ala Lambardars did not show themselves deserving of the remuneration of 1 per cent of the land revenue, which they deducted from the revenue of their village. The system was, therefore, abolished in 1909. In the Kaithal tahsil, Thanesar tahsil and Indri Pargana, *sufedposhi inams* along with the *zaildari* system, were created in the settlement of 1891. In 1909 these *inams* were allowed to continue.

Till 1948, Zaildars and Sufedposhes continued to supervise and assist in the collection of land revenue. They were paid from a portion, usually 1 per cent of the land revenue, set aside for the purpose. The institutions of *zaildari* and *sufedposhi* were abolished in 1948, revived in 1950 and finally abolished in 1952.

Now only Lambardars are responsible for the revenue collection on payment of *pachotra*, a cess charged at the rate of 5 per cent of the land revenue. In case the Lambardar is unable to collect the land revenue, he makes a written petition to the Tahsildar who helps him in effecting recovery. The total number of Lambardars in the district on the 31st March, 1970 was 3,380.

REVENUE ADMINISTRATION AND LAND RECORDS

The unit of revenue administration is an estate which is usually identical with the village. Each of them is separately assessed to land revenue and has a separate record-of-rights and register of fiscal and agricultural statistics. All its proprietors are by law jointly responsible for the payment of land revenue, and in their dealings with Government they are represented by one or more Lambardars. Estates are grouped into patwar circles each of which is under the charge of a Patwari. About 20 of these circles form a charge of a Kanungo whose duty is to supervise the work of Patwaris. A tahsil, as a rule, contains from two to four hundred of the revenue estates.

The district has been sub-divided into tahsils, *kanungo* circles and *patwar* circles as follows :—

Tahsils	Kanungo circles	Patwar circles	Revenue estates
Karnal	Tirawari (Taraori)	20	91
	Indri	20	106
	Karnal	22	98
	Gharaunda	20	68
	Jundla	19	61
Panipat	Panipat	24	87
	Samalkha	23	56
	Naultha	23	42
Thanesar	Radaur	19	94
	Babain	19	124
	Thanesar	19	130
	Shahabad (Shahbad)	20	81
Kaithal	Kaithal	20	73
	Pundri	21	79
	Rajaund	21	68
Gula (Guhla)	Gula (Guhla)	13	82
	Pehowa	16	89

The following staff in the tahsils attends to the revenue work :—

Tahsil	Number of Tahsil- dars	Number of Naib Tahsil- dars	Number of Office Kanun- gos	Number of Assis- tant Office Kanun- gos	Number of Kanun- gos	Number of Pat- waris	Num- ber of Assis- tant Pat- waris
Karnal	1	5	1	1	5	101	1
Panipat	1	3	1	—	3	70	1
Thanesar	1	3	1	—	4	77	1
Kaithal	1	3	1	—	3	62	1
Gula (Guhla)	1	2	1	—	2	29	—
Total (for the district) :	5	16	5	1	17	339	4

For the purpose of revenue administration, the district is under the charge of a Collector (Deputy Commissioner). He is a steward of the State and is bound to respect and preserve from encroachment every private right in the soil which has been created or confirmed by the State. Where the revenue has been fixed for a term only, he is not only to collect it but also to look forward to a time when it will be revised and hence he is to record, in a systematic manner, statistical information which will facilitate its equitable re-assessment. He must ensure and assist in the measures to prevent the damage to crops from causes which are in any degree controllable by man. He must encourage and assist in every effort made by a right-holder for the development of his estate. As a measure of decentralising the revenue work, the powers of Collector have been delegated to the Sub-Divisional Officers for their respective tahsils.

The Tahsildar is an important functionary and is in charge of the tahsil for revenue work including revenue judicial work. He has to control the *patwar* and *kanungo* agency, to collect revenue punctually, to point out promptly to the Collector any failure of crops or seasonal calamity which renders suspension or remission necessary and to carry out within his own sphere other duties connected with land revenue administration. He is

a touring officer and his tours afford him ample opportunities to deal, on the spot, with partition cases and other matters connected with appointment of Lambardars, lapses of land revenue assignments, etc.

The Patwari is an inheritance from the village system of old days.¹ He is appointed for a circle consisting of one or more villages. Besides the proper maintenance of records, the Patwari is required to report to the Tahsildar any calamity affecting land, crops, cattle or the agricultural classes, and to bring to his notice alluvial and diluvial action of rivers, encroachments on Government lands, the death of revenue assignees and pensioners, progress of works made under the agricultural loans and similar laws, and the emigration or immigration of cultivators. He undertakes surveys and field inspections, aids in other Government activities like distribution of relief, etc., prepares the *bachh* (distribution of revenue over holdings) papers showing the demand due from each land-owner to the village *jama* (land revenue demand). When revenue collections are in progress, he must furnish all information that may be required to facilitate the collections. He himself is not permitted to take any part in the collection of the revenue except when any Lambardar refuses to accept the *dhal bachh* (total demand from each land-owner) and no immediate alternative arrangement can be made.

The Patwari is under the immediate supervision of a circle supervisor known as Kanungo who has been functioning since medieval times. The Kanungo is responsible for the conduct and work of Patwaris. He constantly moves about his circle, supervising the work of Patwaris, except in the month of September when he stays at tahsil headquarters to check *jamabandis* received from Patwaris.

The Office Kanungo is the Tahsildar's revenue clerk. His chief work is the maintenance of the statistical revenue records. He has also the charge of the forms and stationery required by Patwaris, keeps the account of mutation fee, records the rainfall and maintains the register of assignees of land revenue and other miscellaneous revenue registers. He is the custodian of all the records received from the Patwaris and a well ordered Kanungo's office is an important factor in the revenue management of a tahsil.

1. Under section 3 of the Punjab Land Revenue Act, 1887, he was 'Village Officer' and was paid from the village officers' cess, but in 1906 (*vide* Punjab Government, Department of Revenue and Agriculture/Revenue notification Nos. 268 and 269, dated November 22, 1906) the liability of the land-owners for the payment to Patwari was abolished.

At district headquarters, there is a District or Sadar Kanungo assisted by a Naib Sadar Kanungo. The Sadar Kanungo is responsible for the efficiency of Kanungos and should be in camp inspecting their work for at least 15 days in every month from October to April. He is the keeper of all records received from Kanungos and Patwaris. He maintains with the help of his assistant, copies of the prescribed statistical registers for each assessment circle, tahsil and the whole district. The responsibility of Tahsildar and Naib Tahsildars for the inspection and correctness of the work of Kanungos and Patwaris is, however, not affected by the duties of the Sadar Kanungo.

LAND REVENUE AND SPECIAL CESSES

Land Revenue.—The details of income from land revenue and remissions during 1961 to 1969 given in Table XXXIV of Appendix indicate that during the years of floods and drought land revenue was remitted to provide relief to the farmers.

Special Cesses.—The following cesses are imposed on the land-owners:—

Village Officers' Cess.—This cess used to include Patwari cess also. In the earlier settlements a normal rate for the Patwari cess was considered to be 6 pies per rupee of land revenue, equivalent to a surcharge of $3\frac{1}{4}$ per cent, an additional $\frac{1}{4}$ or $\frac{1}{2}$ per cent being taken on account of Patwaris' stationery. Later on it was found impossible to meet the expenditure with so light a cess, and the rate was increased, $6\frac{1}{4}$ per cent being commonly taken. The Patwari cess was remitted in 1906 and the village officers' cess was reduced to 5 per cent on the land revenue; 1 per cent additional was charged for the chief headman, if there was one. At present only *pachotra*, 5 per cent of land revenue, is charged as the village officers' cess.

Local Rate.—It has grown from small beginnings. It was usual in early settlements to levy a road cess at 1 per cent of the land revenue. Subsequently, an education cess amounting to 1 per cent and a dak cess amounting to $\frac{1}{2}$ per cent respectively were added. But by the Punjab Local Rates (XX) Act of 1871, a local rate amounting to $6\frac{1}{4}$ per cent on land revenue was imposed. This local rate was raised by the Punjab Local Rates (V) Act, 1878 from $6\frac{1}{4}$ per cent to $8\frac{1}{2}$ per cent for providing relief to the famine stricken people. With the passing of the Punjab District Boards Act, 1883, the road, education and postal cesses were merged into the local rate, and the legal limit of the rate was

raised to $12\frac{1}{2}$ per cent of the land revenue and owners' rate. The rate was reduced to $8\frac{1}{2}$ per cent on April 2, 1906,¹ as a result of the abolition of the famine cess.

In 1919, the local rate was raised to $10\frac{5}{12}$ per cent of the land revenue. This was further increased to $12\frac{1}{2}$ per cent in January 1945, $18\frac{3}{4}$ per cent in June 1945, and $31\frac{3}{4}$ per cent in 1950. In 1954, on the recommendations of the District Board, Karnal, the Punjab Government raised the local rate to 50 per cent of the land revenue and owners' rate.² The following table shows the amount of local rate collections during 1953 to 1970 :—

Year ending <i>Rabi</i>	Local rate collections
	(Rs.)
1953	4,37,276
1954	5,18,272
1955	6,60,329
1956	6,92,953
1957	7,26,460
1958	7,08,981
1959	7,85,247
1960	6,31,300
1961	6,09,292
1962	7,83,422
1963	7,27,605
1964	6,57,048
1965	8,14,469
1966	10,59,598
1967	7,64,833
1968	9,89,248
1969	9,19,335
1970	9,12,812

1. *Vide* Notification No. 87, dated April 2, 1906.

2. *Vide* Punjab Local Government Department Notification No. 3605-LB-54/18638, dated August 16, 1954.

Surcharge on Land Revenue¹.—The assessment of land revenue in the settlement of 1909 was made chiefly on the basis of prices of the produce then prevailing. The increase in prices of various crops had increased the net assets of land and an increase in the assessment of land revenue fell due. But it was not possible for the Government to conduct regular settlements owing to administrative difficulties, and as Government needed more revenue immediately to meet the ever increasing expenditure on development, it was decided that a surcharge should be imposed on the existing land revenue.

Accordingly, the Punjab Land Revenue (Surcharge) Act, 1954, was enacted for the levy of a surcharge, from the *rabi* harvest of the agricultural year 1953-54. Under the Act, every land-owner who pays land revenue in excess of ten rupees, is liable to pay a surcharge thereon to the extent of one quarter of land revenue if the amount payable by him as land revenue does not exceed thirty rupees, and two-fifths of the land revenue if it exceeds thirty rupees. It is also provided in the Act that this surcharge shall continue to be levied so long as the assessment of land revenue prevailing at the commencement of the Act continues to be in force. The income from the surcharge in the district during 1954 to 1969 is given below :

Year ending <i>Rabi</i>	Collection of Surcharge		Total
	on account of previous year	on account of current year	
1	2	3	4
	(Rs.)	(Rs.)	(Rs.)
1954	—	17,870	17,870
1955	—	4,30,577	4,30,577
1956	10,725	2,28,617	2,39,342
1957	4,351	2,44,667	2,49,018
1958	21,204	2,52,997	2,74,201
1959	31,132	2,03,186	2,34,318
1960	25,376	2,42,776	2,68,152
1961	21,320	1,98,230	2,19,550
1962	19,508	2,05,402	2,24,910
1963	23,294	2,06,389	2,29,683

1. Also see foot note on p. 300.

1	2	3	4
	(Rs.)	(Rs.)	(Rs.)
1964	9,592	1,99,119	2,08,711
1965	8,894	2,07,753	2,16,647
1966	5,173	2,12,059	2,17,232
1967	7,415	2,07,337	2,14,752
1968	13,984	2,19,879	2,33,863
1969	5,760	2,19,048	2,24,808

Special charge on land revenue¹.—As the surcharge levied from 1955 proved to be inadequate to meet heavy financial obligations created by various development schemes, it became necessary to augment the State revenues in every possible manner and hence a special charge was levied under the Punjab Land Revenue (Special Charge) Act, 1958, from *rabi* harvest of agricultural year 1957-58. The rate of special charge is based on income tax pattern with different slabs for different categories of land-owners. The slab rates are such that the incidence of special charge falls on those who can afford to pay it. While the land-holders paying revenue (land revenue plus surcharge) up to Rs. 50 have been exempted from the provisions of the Act, those paying more than Rs. 1,000 have been subjected to 300 per cent increase in land revenue. The special charge is to be a permanent feature of the taxation policy of the State Government. The income under the Act in respect of the Karnal district has been as follows :—

Year ending <i>Rabi</i>	Collection of Special Charge		Total
	on account of previous year	on account of current year	
1	2	3	4
	(Rs.)	(Rs.)	(Rs.)
1959	—	1,00,846	1,00,846
1960	25,909	71,791	97,700
1961	16,150	58,296	74,446

1. Also see foot note on p. 300.

1	2	3	4
	(Rs.)	(Rs.)	(Rs.)
1962	17,031	49,249	66,280
1963	11,890	57,736	69,626
1964	14,092	55,206	69,298
1965	13,935	56,066	70,001
1966	3,881	56,182	60,063
1967	7,432	52,443	59,875
1968	7,037	53,419	60,456
1969	2,217	52,357	54,574

Commercial crops cess.¹—A cess on commercial crops namely cotton, sugarcane and chillies at the rate of Rs. 4 per acre in the case of land which is irrigated by canal water and Rs. 2 per acre in case of other land, has been levied from *kharif* 1963 under the Punjab Commercial Crops Cess Act, 1963. Areas under commercial crops, sown solely for domestic use up to one *kanal* in the case of chillies and 2 *kanals* in the case of sugarcane or cotton are exempted from this levy. The income from this cess from the date of its inception was as follows :—

Year ending <i>Rabi</i>	Amount
	(Rs.)
1964	3,39,471
1965	3,53,494
1966	4,79,825
1967	3,94,352
1968	4,01,310
1969	3,71,866

1. Also see foot note on p. 300.

Additional surcharge.¹—An additional surcharge on the land revenue at the rate of 50 per cent was levied for the development of Kurukshetra University/ town. Initially this had been levied for one year that is for *kharif* 1967 and *rabi* 1968 but it was extended for *kharif* and *rabi* harvests for the agricultural year 1968-69. The income from this during 1967 to 1969 was as follows :—

<u>Year ending <i>Rabi</i></u>	<u>Amount</u> (Rs.)
1967	..
1968	6,53,825
1969	6,52,502

Water rates.—Water rates are levied on the area irrigated during each crop under the Northern India Canal and Drainage Act, 1873. The rates were revised a number of times and the last revision was effected from *rabi* 1948. The rates were slightly reduced on wheat and gram crops in 1953-54. The income from this during 1963 to 1969 was as follows :—

<u>Year ending <i>Rabi</i></u>	<u>Amount</u> (Rs.)
1963	49,90,940
1964	41,29,900
1965	46,16,795
1966	43,45,661
1967	63,30,185
1968	71,02,072
1969	80,15,986

1. It was felt by the State Government that the collection of levies under various Acts was cumbersome not only for the revenue agency but also for the cultivators. To overcome this difficulty, the State Government passed the Haryana Land-Holdings Tax Act, 1973 (Act No. 18 of 1973), which came into force on June 16, 1973. This Act consolidated various levies into a single tax known as 'Land-Holdings Tax'. The levies consolidated are : (i) Surcharge, under the Punjab Land Revenue (Surcharge) Act, 1954; (ii) Special Charge, under the Punjab Land Revenue (Special Charge) Act, 1958; (iii) Cess on Commercial Crops, under the Punjab Commercial Crops Cess Act, 1963; and (iv) Additional Surcharge, under the Haryana Land Revenue (Additional Surcharge) Act, 1969 (Haryana Act No. 9 of 1969). However, the Land-Holdings Tax shall not be levied and charged on land which is liable to special assessment under Section 59 of the Punjab Land Revenue Act, 1887, or the Punjab Land Revenue (Special Assessment) Act, 1955. Further, during the period the above tax is levied and charged, the land shall not be liable to payment of land revenue by way of general assessment under the Punjab Land Revenue Act, 1887, or the payment of local rate under the Punjab Panchayat Samitis and Zila Parishads Act, 1961. The Act brings out a concept of the holding on the basis of a family rather than the individual holding as a unit for the purposes of imposition of tax and provides for graded taxation on the basis of size of the holding.

Betterment charges.—Betterment charges are levied under the Punjab Betterment Charges and Acreage Rates Act, 1952. This is levied on the areas served by irrigation projects covered under the Act. The levy is to cover the cost of unproductive portion of these irrigation projects. The income from this levy during 1963 to 1969 was as follows :—

<u>Year ending <i>Rabi</i></u>	<u>Amount</u>
	(Rs.)
1963	11,07,523
1964	15,00,845
1965	17,81,730
1966	16,69,110
1967	23,05,118
1968	23,29,437
1969	20,32,032

LAND REFORMS

Prior to the British occupation, the nature of the peasants' tenure cannot be described accurately in precise legal terms. The tenancy system was the outcome of insecure days when life was disturbed and armies traversed through a tract of 'no-man's land' from one corner to another. This happened during the decay of the Mughal empire and early British rule when there was a struggle for power among various chieftains and tribal chiefs. As a result of insecure conditions of life and one or the other of the numerous famines, the area was desolated and people fled leaving behind deserted villages and fields. To encourage habitation the British leased out patches of waste land and deserted villages to influential and powerful persons of other villages who further sub-let these waste lands to landless people. Thus came into existence the two classes — the landlords and the tenants. The tenants worked under the fear of insecurity and ejection by the landlords. The landlords mainly consisted of the Nawabs, Bhais or the Sikhs and, in some cases, the Rajputs. The Nawabs of Mandal family had their sway in *khadar* tracts of the Karnal and Panipat tahsils with their residence in Karnal, Panipat and Kunjpura. The Bhais or the Sikhs were mainly concentrated in Thanesar and the northern portion of Indri pargana. The Rajputs were

predominant in the *Nardak* tracts of the district. The landlords were neither considerate nor did they grant any concession in a season of scarcity. On the contrary the sole aim was to squeeze as much out of the estate as possible. Poverty ruled over the life and work of the cultivators.

Taking into consideration the deteriorating state of agriculture and the cultivator, the Punjab Tenancy Act of 1887 was enacted which provided for the right of occupancy, but the right was restricted to a small number of tenants. Under the provisions of the Act, a tenant to qualify for the right of occupancy must have held at revenue rates for 30 years, or be the third generation of a family which had held at revenue rates for 20 years or be an ex-proprietor or heir of an ex-proprietor with proprietary and tenant-at-revenue rates status of 20 years' standing. Evidently, only a few could qualify. The other tenants who had no right of occupancy and did not hold for a fixed term could be ejected at the end of any agricultural year. This position continued throughout the British regime. Thus the security of tenure assured to a tenant before Independence was nominal. As shown below, in 1946-47, 31 per cent of the net sown area in the district was held by persons who had no occupancy rights and were always at the mercy of the landlords:

	Percentage of the net sown area held
Peasant proprietors	66
Occupancy tenants	3
Tenants-at-will	31

After Independence, the Government felt immediately concerned to introduce suitable land reforms. The State initiated a policy to extend security of tenures to tenants and coincide ownership with the actual cultivation. To eliminate intermediaries and provide adequate security against eviction and enhancement of rents the Government enacted the following laws :—

- (1) The East Punjab Utilisation of Lands Act, 1949
- (2) The Punjab Abolition of Ala Malikiyat and Talukdari Rights Act, 1952
- (3) The Punjab Occupancy Tenants (Vesting of Proprietary Rights) Act, 1952
- (4) The Punjab Security of Land Tenures Act, 1953

(5) The Punjab Bhudan Yagna Act, 1955

Under the East Punjab Utilisation of Lands Act, 1949, the Government enforced the utilisation of every inch of available culturable land for growing more food and other essential crops. Under this Act a notice to take over the land, is served on every land-owner who allows his land to remain uncultivated for 6 or more consecutive harvests and the land thus taken over is leased out to others for a term ranging from 7 to 20 years, priority being given to Harijans. Under the provisions of this Act, approximately 48,000 acres of land was taken over in the district by the end of 1969-70, the whole of which was leased out.

Under the Punjab Abolition of *Ala Malikiyat* and *Talukdari* Rights Act, 1952, all rights, title and interest of an *ala malik* in the land held under him by an *adna malik* were extinguished and the *adna malik* was required to pay compensation. The Punjab Occupancy Tenants (Vesting of Proprietary Rights) Act, 1952, declared all the occupancy tenants as the owners of the land.

The Punjab Security of Land Tenures Act, 1953, as amended up to date not only reduced the acreage which could be reserved but also specifically prohibited ejectment of tenants from all un-reserved areas, except in case of default in payment of rent or in proper cultivation. Section 9-A, enacted vide Act XI of 1955, provided that no tenant liable to ejectment would be dispossessed of his tenancy unless he was accommodated on a surplus area or otherwise on some other land by the State Government. Rent was limited to one-third of the crop or its value or to the customary rent if that was lower. However, payment for services provided by the landlord excluded from the computation of rent. The Act further extended the opportunities for tenants to become owners. A tenant of 4 years' standing acquired a right of pre-emption at sales or foreclosures; but more important than that, tenants of 6 years' standing were allowed to buy un-reserved area from their landlords at three quarters of the 10-year average of prices of similar land.

Government was further empowered to utilise the surplus area of both land-owners and tenants for the re-settlement of ejected tenants, landless labourers and small land-owners. All areas owned by a local owner above 30 standard acres and by a displaced person above 50 standard acres were considered as surplus area. A small owner, who has up to 30 standard acres, cannot eject a tenant under the Act from 5 standard acres unless the tenant has been settled by Government on surplus area.

The work of assessment of surplus area under the Act made considerable headway. By 1968, 2,068 cases of surplus area were decided and about 45,541 standard acres of land was declared surplus.

The re-settlement of eligible tenants was also started all over the district and about 8,044 tenants were re-settled on an area of about 12,729 standard acres. Proprietary rights were given to 917 tenants in an area of approximately 3,047 acres.

The State Government gives financial assistance to those tenants and landless agricultural workers who are being re-settled on the surplus area for reclamation purposes, and also advances loans for building houses and sinking wells.¹

1. The Punjab Security of Land Tenures Act, 1953 and the Pepsu Tenancy and Agricultural Lands Act, 1955 which contained *inter alia* provisions relating to ceiling on agricultural land-holdings, utilization of surplus area and security for tenants against exploitation and ejection were in force in different parts of Haryana. On a consideration of the report of the Central Land Reforms Committee, a national policy was evolved in 1972 for removing economic disparities by making available additional land for equitable distribution among the landless persons and also for enlarging the scope of employment. It was felt that this national objective would be achieved by the lowering of the ceiling on agricultural holdings, and that with the increase in agricultural production the ceiling could be lowered without rendering the holdings uneconomic. With this end in view and also to remove certain defects which had come to notice in the course of the implementation of the two Acts, the Haryana Ceiling on Land Holdings Act, 1972, was enacted. This Act repeals the provisions of the two earlier Acts in so far as they relate to the placing of a ceiling on land-holdings and utilization of surplus area. The new Act provides for the assessment of permissible area in relation to a family instead of an individual, and reduces the permissible limit to 7.25 hectares of land under assured irrigation capable of growing at least two crops in a year, 10.9 hectares of land under assured irrigation capable of growing at least one crop in a year or 21.8 hectares in respect of any other land including *banjar* and land under orchards. In case the family comprises more than three minor children, an additional area at the rate of 1/5th of the permissible area of the primary unit is permitted for each additional member provided that the total does not exceed twice the permissible area of the primary unit. The head of a primary unit has also been given a right to select for each of his major sons (or widow and minor children of a pre-deceased son) area equivalent to the permissible limit of a primary unit. Further, unlike the Punjab Security of Land Tenures Act, 1953, the new Act provides for the vesting of the surplus area in the Government and for its utilization for settlement of tenants and other economically weaker sections of society, for example members of the Scheduled Castes and Backward Classes, landless agricultural labour and others. A utilization scheme is being prepared by the State Government and the provisions of the Act would be given effect to, as soon as the scheme is formulated.

The Punjab Bhudan Yagna Act, 1955, gave recognition to the Bhoodan Movement, the object of which is to receive donations of lands and distribute them among landless persons who are capable of cultivating them personally. Bhoodan work in the Karnal district was started in 1954 by a committee called District Bhoodan Samiti. As a result of the efforts of this committee, 774 acres (313 hectares) of land was received as donation. Of this, 217 acres (88 hectares) of land has been transferred in the name of the Haryana Bhoodan Yagna Board. The Board has so far (1970) allotted 100 acres (40.5 hectares) of land to 29 landless families.

Consolidation of holdings.—The work of consolidation of land-holdings was started in 1930 by the Co-operative Department but in the absence of any legislation, it did not make much headway. To make good this legislative deficiency, the State Government enacted the East Punjab Holdings (Consolidation and Prevention of Fragmentation) Act, 1948 and created a separate Consolidation Department in 1949. The work in the district was started in 1951 and partially completed in December 1962. The action is being taken towards the consolidation of the remaining area.

OTHER SOURCES OF REVENUE, STATE AS WELL AS CENTRAL

OTHER SOURCES OF STATE REVENUE

In addition to the land there are other sources from which the State derives its revenue. These are described below briefly:

Stamp Duty.—This duty is collected under the Court Fees Act, 1870, and the Indian Stamp Act, 1899. The former was enforced on April 1, 1870, and the latter on July 1, 1899. Both these Acts were amended a number of times. The Court Fees Act was last amended by the Court Fees (Haryana Amendment) Act, 1974. The Stamp Duty Act was last amended by the Haryana Act No. 7 of 1967. Both these Acts require the Collector (or Deputy Commissioner), District and Sessions Judge and all the Sub-Judges to ensure that the applications for all suits and other relevant documents are properly stamped according to schedule. The collection of stamp duty under these Acts during 1963-64 to 1969-70 was as follows :—

Year	Judicial (under the Court Fees Act)	Non-judicial (under the Stamp Act)	Total
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
	(Rs.)	(Rs.)	(Rs.)
1963-64	4,82,160	25,88,253	30,70,413

1	2	3	4
1964-65	5,37,270	35,28,162	40,65,432
1965-66	6,06,184	26,47,592	32,53,776
1966-67	8,53,468	29,33,027	37,86,495
1967-68	7,35,981	48,69,174	56,05,155
1968-69	7,80,111	67,64,109	75,44,220
1969-70	9,93,228	26,25,934	36,19,162

Registration Fee.—The statement below gives the number of registrations, the value of property registered and the receipts for 1961-62 to 1969-70 :

Year	Registrations		Value		Amount of registration fee
	movable property	immovable property	movable property	immovable property	
	(Number)	(Number)	(Rs.)	(Rs.)	(Rs.)
1961-62	462	9,825	3,27,475	2,31,23,907	1,83,035
1962-63	643	9,825	1,65,102	2,92,98,519	1,90,469
1963-64	617	10,012	66,599	2,99,68,036	1,97,206
1964-65	681	12,907	2,07,057	4,62,85,375	2,75,563
1965-66	654	12,889	1,19,275	5,18,33,340	3,58,417
1966-67	703	13,247	1,37,000	5,90,23,671	7,19,033
1967-68	804	14,325	80,900	7,72,46,441	8,58,483
1968-69	727	15,700	82,450	10,79,28,784	11,73,349
1969-70	787	16,876	1,45,700	12,96,93,353	13,66,348

Professions Tax.—Every person who carries on trade, either himself or through an agent or representative, or who follows a profession or calling or is in employment either wholly or in part, within the State, is liable to pay for each financial year or a part thereof, a tax under the Punjab Professions, Trades, Callings and Employments Taxation Act, 1956. The maximum limit of tax payable by any person is Rs. 250 in a financial year and the minimum is Rs. 120 when the total annual gross income exceeds Rs. 6,000. The Excise and Taxation Officer, Karnal, functions as

Assessing Authority under the Act. The table below shows the amount realised during 1956-57 to 1969-70 :

<u>Year</u>	<u>Amount</u>
	(Rs.)
1956-57	9,637
1957-58	54,313
1958-59	96,709
1959-60	1,14,531
1960-61	1,05,407
1961-62	1,27,003
1962-63	1,95,459
1963-64	1,87,580
1964-65	2,25,890
1965-66	2,13,100
1966-67	4,56,270
1967-68	3,24,329
1968-69	3,90,197
1969-70	4,77,851

Excise and Taxation.—For the administration of Excise and Taxation Acts, the district in March 1970, was under the charge of an Excise and Taxation Officer who was assisted by 8 Assistant Excise and Taxation Officers. He was further assisted by 12 Inspectors on the excise side, and 19 Inspectors on the taxation side. Besides, there were 2 Additional Excise and Taxation Officers.

The State and Central Acts that are enforced in the State on the excise side are¹ : The Punjab Excise Act, 1914 ; The Punjab Local Option Act, 1923 ; The East Punjab Molasses (Control) Act, 1948 ; The Indian Opium Act, 1878 ; The Dangerous Drugs Act, 1930 ; The Indian Power Alcohol Act, 1948 ; The Medicinal and Toilet Preparations

1. The East Punjab Opium Smoking Act, 1948, was repealed in 1960.

(Excise Duties) Act, 1955 ; and the Spirituous Preparations (Inter-State Trade and Commerce) Control Act, 1955.

Excise revenue for 1956-57 to 1969-70 is shown below :

Year	Receipts from liquor licence fee	Receipts from excise duty	Receipts from opium	Receipts from <i>bhang</i>	Net excise revenue
	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
1956-57	3,57,796	16,74,886	2,10,810	8,855	22,25,545
1957-58	4,83,775	33,14,134	1,72,610	9,460	39,71,569
1958-59	7,16,276	30,19,460	1,03,280	9,325	38,17,564
1959-60	8,21,108	2,73,026	2,415	15,465	10,77,988
1960-61	8,38,044	2,94,843	960	8,545	11,24,259
1961-62	10,15,229	5,61,481	640	8,264	15,88,987
1962-63	11,06,388	6,33,662	900	6,165	17,53,707
1963-64	9,59,274	13,20,910	—	8,041	22,88,220
1964-65	9,43,894	23,32,187	—	13,410	32,89,490
1965-66	13,54,275	28,89,918	—	—	42,44,190
1966-67	54,043	50,74,343	—	—	51,28,380
1967-68	10,37,232	84,70,857	—	408	1,09,35,718
1968-69	1,37,06,676	18,87,069	860	1,085	1,55,95,690
1969-70	1,28,17,885	14,09,221	—	505	1,42,27,611

On the taxation side, the taxes as detailed below are collected under the State and Central Acts by the Excise and Taxation Department :

Property Tax.—This tax was levied under the Punjab Urban Immovable Property Tax Act, 1940. It is charged at the rate of 10 per cent except in 1961-62 when it was charged at the rate of 15 per cent of the annual rental value of the buildings and land, situated in the rating area. Besides, a surcharge at the rate of 50 per cent of the tax has also been levied from

1967-68. Collections under the Act during 1956-57 to 1969-70 were as follows :—

Year	Amount (Rs.)
1955-56	2,12,310
1956-57	1,96,762
1957-58	1,99,538
1958-59	2,23,972
1959-60	2,26,926
1960-61	2,79,823
1961-62	4,92,757
1962-63	3,75,939
1963-64	5,21,900
1964-65	5,38,630
1965-66	4,53,580
1966-67	4,60,800
1967-68	6,55,394
1968-69	4,84,367
1969-70	11,96,052

Sales Tax.—The Punjab General Sales Tax Act, 1941, was repealed on May 1, 1949, when the East Punjab General Sales Tax Act, 1948,¹ came into force. The turnover pertaining to the period prior to May 1, 1949, however, continued to be dealt with under the old Act. The general rate of tax under this Act during 1969-70 was 6 paise a rupee. On luxury goods like motor vehicles, refrigerators, clocks and watches, iron and steel safes and almirahs, radios and radio-parts, gramophones, etc., the rate of tax was 10 per cent. Resin, groundnut and paddy are subjected to tax at the stage of purchase. Purchase tax on resin and groundnut is leviable at the rate of 2 per cent and on paddy it is leviable at the rate of 3 per cent. Goods that are exported, or are sold to registered dealers in the State or are the subject

1. Replaced by the Haryana General Sales Tax Act, 1973, since May 5, 1973.

of inter-State trade, are not taxed under the Act.

Special Treatment.—Special treatment has been given to the following goods, as is clear from the current rates (1969-70) of tax mentioned against each :

Foodgrains and pulses	3 per cent
Declared Goods ¹ (e.g. cotton, oil, iron and steel, etc.)	3 per cent
Gold and silver articles and wares, ornaments and jewellery	2 per cent
Bullion and specie	1/2 per cent
Sales to Government Department against a prescribed certificate	3 per cent
Ready-made sewn garments made out of handloom or mill-made cloth, etc.	2 per cent
Tractors	2 per cent
Raw hides and raw skins	3 per cent
Cotton waste and cotton yarn waste	3 per cent
All types of yarn except cotton yarn (woollen or silken)	2 per cent
Cotton yarn	1 per cent
Condensed milk and cream	exempted
Butter, cheese and milk powder	6 per cent
Vegetable ghee, cement, bricks and molasses	at first stage on general rate
Arms and ammunition, motor cycle and scooter	10 per cent
Cotton waste and cotton yarn waste	3 per cent

Exemptions.—Exemptions have been allowed to electric energy, agricultural implements, fertilizers, kerosene oil,² fodder, vegetables, fresh fruits, sugar, textiles,³ all goods sold to Indian Red Cross Society,

1. Goods which are of special importance in inter-state trade have been termed as 'declared goods'.

2. Sales tax at the rate of 7 per cent has been levied on kerosene oil since July 1, 1969.

3. Sugar and textiles have been exempted because excise duty has been levied on them by the Central Government.

John Ambulance Association, Co-operative for American Relief Everywhere (CARE), United Nations Technical Assistance Board, Save the Children Fund, United Nations International Children and Emergency Fund, World Health Organisation and some co-operative societies.

The receipts of the sales tax during 1955-56 to 1969-70 given below indicate that this source of revenue has been assuming increasing importance :

<u>Year</u>	<u>Amount</u>
	(Rs.)
1955-56	15,72,629
1956-57	19,14,030
1957-58	22,99,650
1958-59	18,39,445
1959-60	21,19,976
1960-61	22,25,292
1961-62	24,49,890
1962-63	30,64,218
1963-64	43,20,110
1964-65	53,25,750
1965-66	63,05,740
1966-67	67,78,890
1967-68	88,74,759
1968-69	1,39,72,495
1969-70	1,90,52,267

Entertainment Duty.—The Punjab Entertainments Duty Act, 1936, was repealed by the Punjab Entertainments Duty Act, 1955, on November 4, 1955. The rates of duty have been changing and since 1966-67 the rate of tax is 50 per cent on the payment of admission to a show. Its incidence fall on the person who witnesses the entertainment. The collections during

1955-56 to 1969-70 under this Act were as follows :—

Year	Amount
	(Rs.)
1955-56	1,20,024
1956-57	1,60,851
1957-58	1,78,814
1958-59	2,12,860
1959-60	2,60,715
1960-61	3,21,827
1961-62	4,14,301
1962-63	5,12,261
1963-64	6,32,070
1964-65	6,90,440
1965-66	8,12,180
1966-67	9,66,050
1967-68	11,50,325
1968-69	14,39,109
1969-70	18,56,674



Motor Spirit Tax.—This tax was levied under the Punjab Motor Spirit (Taxation of Sales) Act, 1939. The rate of tax which was 3 annas¹ per imperial gallon till July 14, 1957 was enhanced to 4 annas on July 15, 1957. Again the rate was enhanced to 30 paise per imperial gallon on April 20, 1959. This was converted into 7 paise per litre on May 13, 1960. The tax on petrol was increased to 9 paise per litre on October 31, 1966. These rates were further revised on July 22, 1967 and the rate of tax in the case of all motor spirit other than petrol was fixed 4 paise per litre and in the case of petrol 5 paise per litre. The stage of levy of the tax was shifted from 'last sale' to 'first sale' within the State. These rates were again revised

1. One anna = 1/16th of a rupee.

on May 8, 1968 and the rate of tax fixed 6 paise per litre in respect of all motor spirits at the first stage of sales. Receipts under the Act during 1955-56 to 1969-70 were :

<u>Year</u>	<u>Amount</u>
	(Rs.)
1955-56	1,84,843
1956-57	1,95,527
1957-58	2,56,727
1958-59	2,82,801
1959-60	2,50,356
1960-61	3,73,464
1961-62	4,25,052
1962-63	3,72,999
1963-64	3,79,580
1964-65	4,16,690
1965-66	4,22,910
1966-67	5,57,300
1967-68	3,09,791
1968-69	10,781
1969-70	17,332

Passengers and Goods Tax.—The Punjab Passengers and Goods Taxation Act, 1952, was enforced on August 1, 1952. The Act provides that a tax shall be levied on all fares and freights in respect of passengers carried and goods transported in motor vehicles in the State. The rate of tax changed a number of times and in 1967-68 was 35 per cent of the fare and freight. It was further enhanced to 40 per cent from October 7, 1969. In the case of contract and public carriages, the levy was made in the form of a lump sum.

The collections made under the Act since the date of its enforcement are given below :

<u>Year</u>	<u>Amount</u> (Rs.)
1952-53	1,41,816
1953-54	3,56,297
1954-55	3,77,116
1955-56	3,87,355
1956-57	6,63,923
1957-58	9,39,050
1958-59	11,59,457
1959-60	12,58,115
1960-61	12,76,133
1961-62	14,03,486
1962-63	18,34,675
1963-64	28,61,480
1964-65	29,63,740
1965-66	32,02,860
1966-67	33,12,800
1967-68	47,26,054
1968-69	59,20,295
1969-70	72,98,569

Show Tax.—The Punjab Entertainments Tax (Cinematograph Shows) Act, 1954 was enforced on May 4, 1954. The show tax is levied on the exhibitors for every show on the number of occupied seats of a cinema

house. The rate of tax in 1969-70 was as follows :—

Place	Rate per 100 seats per show
	(Rs.)
Karnal, Kaithal and Panipat	4.40
Thanesar	2.60
Shahabad (Shahbad)	1.74

The collections of tax since its enforcement are given below :

Year	Amount
	(Rs.)
1954-55	10,174
1955-56	16,194
1956-57	17,405
1957-58	16,403
1958-59	19,477
1959-60	20,237
1960-61	15,758
1961-62	17,683
1962-63	19,135
1963-64	21,800
1964-65	23,730
1965-66	46,780
1966-67	47,780
1967-68	1,28,949
1968-69	1,84,906
1969-70	2,07,125

Central Sales Tax.—The Central Sales Tax Act, 1956, provides for levy of tax on sales effected in the course of inter-State trade and commerce. States have been authorised to administer this tax on behalf of the Government of India. The entire collections of the tax under the Act are appropriated by the States. The general rates of tax in 1969-70 were as under :

- (i) Inter-State sales to registered dealers 'C' forms 3 per cent

(ii) Inter-State sales to inregistered dealers	10 per cent
(iii) *Declared goods to registered dealers or un-registered dealers	Up to 3 per cent

The collections made in the district since the enforcement of the Act are given below :

<u>Year</u>	<u>Amount</u>
	(Rs.)
1957-58	48,007
1958-59	1,31,112
1959-60	2,20,105
1960-61	2,31,555
1961-62	3,07,223
1962-63	3,34,477
1963-64	5,10,330
1964-65	5,92,340
1965-66	6,02,480
1966-67	11,53,040
1967-68	17,26,432
1968-69	47,71,414
1969-70	55,08,694



CENTRAL SOURCES OF REVENUE

Central Excise Duties.—The Karnal district falls in Rohtak division for Central excise duties. The work in the district is looked after by the Superintendent Central Excise, Yamuna Nagar. Tobacco, cotton fabrics, sugar *khandsari*, vegetable non-essential oils and cycle parts are the main sources of Central excise duty. The collections of central excise duties were as below :

<u>Year</u>	<u>Amount</u>
1	2
	(Rs.)
1958-59	38,56,144
1959-60	36,12,221
1960-61	36,39,946

1	2
	(Rs.)
1961-62	42,54,831
1962-63	62,40,079
1963-64	64,85,157
1964-65	56,82,051
1965-66	66,02,013
1966-67	94,76,386
1967-68	3,17,05,090
1968-69	3,07,10,460
1969-70	3,83,67,331

Income Tax.—The Indian Income Tax Act of 1922 was replaced by the Income-tax Act of 1961 on April 1, 1962. The receipts under this Act were :

Year	Amount
	(Rs.)
1958-59	8,04,918
1959-60	8,75,647
1960-61	11,22,805
1961-62	16,18,213
1962-63	22,31,655
1963-64	21,69,000
1964-65	29,13,000
1965-66	15,83,000
1966-67	22,30,000
1967-68	19,30,000
1968-69	32,50,004
1969-70	37,95,668

Estate Duty.—The Estate Duty Act, 1953 (34 of 1953) was enforced on October 15, 1953. The duty is leviable on the estates of those dying after this date. Proceedings for this levy are to be initiated within 5 years of the death but no time limit has been fixed for the completion of assessment.

The collections made in the district under this Act during 1958-59 to 1969-70 were :

<u>Year</u>	<u>Amount</u>
	(Rs.)
1958-59	7,109
1959-60	2,587
1960-61	1,184
1961-62	617
1962-63	8,337
1963-64	5,280
1964-65	62,777
1965-66	40,665
1966-67	25,333
1967-68	9,745
1968-69	30,244
1969-70	35,445



Wealth Tax.—The Wealth-tax Act, 1957, came into force from the assessment year 1957-58. In the case of an individual the tax is leviable if the net wealth exceeds Rs. 1 lakh, and in the case of Hindu undivided family, if it exceeds Rs. 2 lakhs. The collections under this Act during 1958-59 to 1969-70 were :

<u>Year</u>	<u>Amount</u>
	(Rs.)
1958-59	4,285
1959-60	4,942
1960-61	955
1961-62	1,458
1962-63	2,405
1963-64	1,000

<u>1</u>	<u>2</u>
	(Rs.)
1964-65	11,000
1965-66	11,000
1966-67	14,000
1967-68	19,000
1968-69	30,227
1969-70	52,656

Gift Tax.—The Gift-tax Act, 1958 was enforced on April 1, 1958. It is leviable on all gifts made after April 1, 1957, if the total value of the gift (movable or immovable) exceeds Rs. 10,000. The collections made in the district under this Act during 1958-59 to 1969-70 were :

<u>Year</u>	<u>Amount</u>
	(Rs.)
1958-59	19,336
1959-60	8,133
1960-61	3,417
1961-62	6,425
1962-63	5,712
1963-64	10,000
1964-65	38,000
1965-66	22,000
1966-67	12,000
1967-68	8,000
1968-69	30,539
1969-70	12,136



सत्यमेव जयते

Chapter XII

LAW AND ORDER AND JUSTICE

LAW AND ORDER

INCIDENCE OF CRIME

Cattle-stealing was the characteristic crime in the district during the opening years of the present century. Such thefts were performed in a very systematic form, the animals being rapidly transferred to great distances and to other districts through a chain of accomplices. The aggrieved party generally appealed to a self-constituted *panchayat*, or a committee of the leading men in a village or tract, in order to secure the return of his animal, instead of reporting the matter to the police. This practice naturally rendered the crime extremely difficult to handle. Crimes of violence were not very common in the district, though occasionally murders and dacoities of a serious nature did occur.¹

The crime data prior to 1940 are not available. However, the general crime situation conformed more or less to what is stated above. Serious crime was still rare but a lot of petty crime, particularly cattle lifting was committed. It was not reported to the police, as the village *panchayats* played a vital role in settling small disputes.

The table below shows the trend of criminal cases of all kinds brought to trial during the years 1940—69. This shows at a glance the picture of crimes in the few years preceding the Partition in 1947 and in the subsequent years :

Year	Total cases reported	Cases brought forward from previous year	Cases cancelled ²	Cases pending at the close of the year	True cases ²
1	2	3	4	5	6
1940	2,058	237	331	247	1,717
1941	2,014	247	356	329	1,576

1. *Karnal District Gazetteer*, 1918, p. 202.

2. Out of the reported cases, those which are admitted by the police are termed as 'true cases' whereas those found false are treated as 'cancelled'.

1	2	3	4	5	6
1942	1,446	329	298	279	1,398
1943	2,012	279	390	416	1,458
1944	2,243	416	446	441	1,772
1945	2,374	441	397	569	1,849
1946	3,071	569	381	981	2,278
1947	3,378	981	400	1,615	2,344
1948	5,923	1,615	420	1,598	5,520
1949	6,450	1,598	315	1,523	6,210
1950	4,600	1,523	269	1,338	3,916
1951	4,480	1,338	229	1,238	4,451
1952	3,736	1,238	195	986	3,793
1953	3,107	986	205	797	3,091
1954	2,939	797	202	819	2,715
1955	2,849	819	205	948	2,515
1956	3,077	948	225	976	2,824
1957	3,137	976	180	1,085	2,898
1958	3,036	1,085	140	1,231	2,750
1959	3,143	1,231	149	1,478	2,747
1960	3,408	1,478	161	1,684	3,041
1961	3,373	1,684	160	1,649	3,248
1962	3,701	1,649	133	1,534	3,683
1963	3,993	1,534	206	1,546	3,774
1964	4,284	1,546	304	1,682	3,844
1965	4,930	1,682	369	2,147	4,096
1966	5,456	2,147	313	2,596	4,694
1967	5,433	2,596	316	2,621	4,992
1968	5,203	2,621	155	2,891	4,778
1969	5,420	2,891	141	3,576	4,594

The reported cases show an overall increase in crimes. The highest figures are for the years 1948 and 1949. The disorderly conditions resulting from the Partition were responsible for this increase. Consequent upon the Partition, the Muslims migrated to Pakistan and in their place the displaced persons from that side who settled here, mostly consisted of Virk and Rai Sikhs from the notorious criminal districts of the West Punjab. Having lost almost everything on account of the Partition, they were in a desparate mood and indulged in all kinds of crime. The setting up of new Camps/ Model Towns at Karnal, Panipat, Nilu Kheri (Nilo Kheri), etc., also contributed to the rising trend in crimes. The downward trend began after 1949 and almost stabilised with slight variations during the period 1953—59. Virk and Rai Sikhs having settled on the lands allotted to them began to clear the jungles on their lands putting in real hard work. This turned them to constructive work resulting in welcome decline in crimes. The steady rise in the number of reported cases after 1959 may be attributed to increase in population, illicit distillation on a large scale and a growing desire to report all crimes/disputes to the police. The police on their part had also become more vigilant in detecting cases under the Excise Act, the Arms Act and also extensive action under the Police Act for the maintenance of peace and tranquillity. The table below illustrates this contention :

Particulars of cases	Cases detected			
	1946	1950	1967	1969
Under Police Act	119	735	1,048	877
Under Excise Act	41	582	1,546	1,920
Under Arms Act	39	101	167	171

Under the Police Act, which is applicable in the towns and deals with lesser offences relating to public peace, regulation of traffic, etc., there was an increase of 616 cases in 1950, 929 in 1967 and 758 in 1969 as against the figure of 1946. Under the Excise Act the increase was to the tune of 541, 1,505 and 1,879 cases in 1950, 1967 and 1969 respectively as compared to the figure of 1946. Similarly under the Arms Act, there had been an increase in detections. No doubt there is overall increase in the incidence of crime, the law and order situation in the district is well under control. The incidence of grave crimes like dacoity and robbery, is conspicuous by its absence.

The following statement shows the number of cognizable offences reported to the police :—

Year	Reported cases ¹	True cases ²
1946	2,477	1,833
1947	2,500	1,691
1948	3,325	3,341
1949	2,983	2,891
1950	2,219	2,092
1951	1,982	1,889
1952	1,861	1,789
1953	1,596	1,553
1954	1,539	1,307
1955	1,575	1,389
1956	1,491	1,390
1957	1,353	1,209
1958	1,436	1,107
1959	1,312	983
1960	1,388	1,068
1961	1,444	1,293
1962	1,555	1,445
1963	1,694	1,572
1964	1,685	1,521
1965	1,680	1,531
1966	2,178	1,986
1967	2,000	1,806
1968	1,948	1,680
1969	1,859	1,625

1. These cases include all cognizable offences except cases under the security sections of Criminal Procedure Code and cognizable offences in which complaints were filed direct before the Magistrates.

2. Number of true cases includes those pending from the previous year.

The incidence of cognizable offences reported during 1946—49 shows an increase, the main cause for which was the unsettled conditions then prevailing. As the conditions improved, the incidence of crime decreased. The steady increase is again noticeable during 1960 and 1966. There are, however, no alarming features in this upward trend. The reasons are the same as have already been explained while discussing the general crime situation. However, the incidence of crime has taken a downward trend from 1967 onward.

Murder.—The incidence of murder in the district from 1955 onwards is illustrated in the following table :—

Year	Cases reported	Total cases dealt with (including pending cases from the last year)	True cases	Cases tried	Cases convicted
1955	37	54	32	27	9
1956	40	61	42	34	15
1957	26	45	27	22	11
1958	31	49	34	30	18
1959	36	51	21	18	7
1960	32	61	29	27	16
1961	49	79	39	33	15
1962	47	86	52	39	23
1963	30	61	43	39	27
1964	33	50	25	24	15
1965	40	65	32	28	11
1966	44	77	46	33	18
1967	43	74	47	39	17
1968	46	71	35	26	20
1969	44	80	33	32	18

Murder statistics are notoriously slippery and fluctuating depending upon sudden outburst of violence. The significant motives behind murder are usually illicit sexual relations, domestic quarrels, blood feuds, land disputes, lure of property, canal water disputes, personal enmity, etc. The incidence of this type of crime is mainly confined to rural areas and is common among the Jats and Virks. Their revengeful nature acknowledges no time limit.

Dacoity.—The offence of dacoity greatly increased during the Partition days when 64 dacoities were reported in the district during 1947 and 37 during 1948. Some of the criminals were treated as heroes and accorded special recognition by various anti-social elements. Anti-dacoity staff was organised to operate in the affected areas. During the period 1947 to 1950, several notorious gangs were liquidated. The measures taken by the police proved effective and this form of crime has become rare. During 1959—69, only 5 cases of dacoity were reported; one each in 1959, 1961 and 1966 and two in 1964.

Robbery.—The incidence of this crime was much too high in 1947 and in the subsequent few years. The cases reported were 103 in 1947, 97 in 1948, 71 in 1949, 54 in 1950 and 51 in 1951. Extensive measures adopted by way of patrolling and other preventive measures by the district police brought the offenders to book and the crime declined considerably. The downward trend in this crime was evident in 1952 when only 16 cases were reported. The anti-robbery measures and strict vigilance have almost eliminated the crime. Only 31 cases were reported during the years 1961—69; 6 in 1961, 6 in 1962, 4 in 1963, 6 in 1964, 4 in 1965, 2 in 1968 and 1 each in 1966, 1967 and 1969.

Burglary.—The following figures indicate the incidence of burglary in the district during 1947 to 1969 :—

Year	Cases brought forward from previous year	Cases reported during the year	True cases	Cases tried	Cases convicted	Cases untraced
1	2	3	4	5	6	7
1947	214	708	600	97	70	503
1948	264	743	832	184	135	648

1	2	3	4	5	6	7
1949	142	777	747	252	197	495
1950	133	625	604	217	175	387
1951	123	537	522	187	152	335
1952	118	485	462	129	105	333
1953	112	400	415	141	115	274
1954	81	376	358	138	112	220
1955	87	349	346	150	118	196
1956	83	316	311	95	70	216
1957	73	259	257	101	74	156
1958	58	252	240	78	50	162
1959	60	228	217	58	42	159
1960	83	276	209	45	33	164
1961	121	307	300	88	59	212
1962	108	341	306	88	61	218
1963	133	364	344	95	74	249
1964	140	382	376	122	64	254
1965	130	315	271	107	52	164
1966	154	452	353	169	134	184
1967	242	404	417	144	98	273
1968	210	403	383	140	93	243
1969	223	413	388	131	93	257

The Partition presented unprecedented problems. The deteriorated economic

situation and the unsettled conditions then prevailing in the Punjab had adversely affected the morale of the people. Burglary was committed by some people who had exhausted their resources, who were unemployed and who had, therefore, no other means of livelihood. Besides, the criminal elements in the population took full advantage of the unsettled conditions. The population of the towns had more than doubled; but the police force was not strengthened to cope with the situation.

Despite manifold handicaps, considerable improvement was brought about by vigilant patrolling, rounding up of large number of hitherto untraced criminals, efficient working of the District Central Intelligence Agency and effective action under Sections 109 and 110 of Criminal Procedure Code. The incidence of burglary which showed an abnormal increase during 1948 to 1951, started showing a downward trend from 1952 and it was the lowest in 1959. There was considerable rise in crime from 1960 onward. Economic conditions exercise much influence on the fluctuation of crime particularly against property. The high cost of living and the rising prices naturally provided an impetus to criminal elements to commit crime. The other factors responsible were the enormous increase in population, springing up of suburban localities in the vicinity of towns, development of fast means of transportation, unemployment, weakening of the moral fibre and growing desire to find an easy way to live comfortably. While crime recorded an increase and population also increased at a fast pace, the police force had still not been increased in consonance with the changed circumstances.

The proportion of untraced burglary cases is no doubt high but certain factors, partly inherent in the crime, and partly stemming from the ignorance of the people seriously hamper successful investigation. Burglars are usually active during the summer nights when the people sleep outside in the open. And again, the circumstantial evidence and other possible clues left by the criminal at the time of the commission of crime are destroyed unwittingly by the parties concerned through ignorance.

Rioting.—Riots generally occur over land disputes or personal enmity and are usually common among the rural people. In recent years this crime has considerably decreased. Only 8 cases were reported in 1960, 10 in 1961, 11 in 1962, 4 in 1963, 5 in 1964, 2 in 1965, 7 each in 1966 and 1967, 10 in 1968 and 4 in 1969.

Theft.—The following table gives the incidence of theft during 1948 to 1969 :—

Year	Cases reported	Total cases (including pending for the last year)	True cases	Cases tried	Cases convicted
1948	1,043	1,281	1,006	443	375
1949	739	934	758	328	253
1950	485	622	460	172	140
1951	460	586	441	165	138
1952	422	542	414	124	103
1953	369	476	402	134	113
1954	384	440	352	109	92
1955	378	450	316	150	123
1956	340	454	329	142	102
1957	331	413	311	127	95
1958	324	395	291	131	99
1959	274	362	248	100	76
1960	270	373	253	95	74
1961	314	420	274	120	86
1962	354	492	324	112	85
1963	389	545	356	166	129
1964	380	544	354	143	107
1965	397	546	275	136	102
1966	607	847	432	236	171
1967	554	933	553	214	146
1968	561	910	494	238	185
1969	482	881	448	219	169

The above figures show that a large number of thefts were committed during 1948 and 1949. The factors responsible were the Partition in 1947 and consequent immigration and economic misery of the displaced persons. After 1949, the offence declined steadily and the upward trend again started only after 1960. Free registration of cases accounts for the high incidence of reported cases of theft. A large proportion of such cases is usually of minor nature involving small amounts of stolen property. High figures of the reported cases in the years 1966, 1967 and 1968 are really intriguing; but this increase was due to larger number of bicycle-thefts resulting from negligence on the part of bicycle-owners. In the previous years, the bicycle-thefts were comparatively less as the following figures would show :—

Year	Bicycle-thefts
1957	47
1958	52
1959	32
1960	52
1961	54
1962	67
1963	73
1964	69
1965	66
1966	105
1967	112
1968	97
1969	74

Cattle-theft.—As stated earlier, it was once recorded as the characteristic crime of the district.¹ The tracing out of gangs of cattle-thieves and efforts of the police to liquidate such lawless elements brought the crime under control to a considerable extent. The increase in the trend of cattle-thefts after 1953 is not so high as to require special comments. The

1. *Karnal District Gazetteer*, 1918, p. 202.

following table shows the incidence of this crime during 1948 to 1969 :—

Year	Cases brought forward from last year	Cases reported	Total cases	True cases	Cases tried	Cases convicted
1948	170	640	810	621	148	106
1949	129	569	698	516	167	133
1950	147	472	619	474	143	115
1951	116	322	438	298	103	83
1952	119	314	433	300	88	72
1953	113	267	380	307	99	82
1954	54	161	215	156	54	45
1955	46	162	208	135	90	53
1956	61	142	203	173	74	47
1957	24	129	153	121	40	23
1958	30	113	143	93	37	22
1959	45	93	138	72	39	19
1960	65	112	177	96	40	20
1961	78	96	174	106	42	22
1962	58	120	178	103	29	16
1963	73	181	254	130	38	24
1964	116	163	279	173	63	41
1965	90	138	228	123	56	34
1966	91	169	260	104	58	23
1967	142	136	278	148	55	22
1968	121	123	244	145	55	31
1969	91	112	203	97	30	177

There is an interesting contrast between the large number of cases reported and relatively a small number of convictions. The large number of cases includes cases of straying cattle originally registered as theft cases.

Traffic in women.—The crime registered an increase during the years immediately following the Partition and fluctuated thereafter. After the Partition, the morality of the people and the respect for law was at the lowest ebb, which caused an increase in the incidence of sex crime. However, during the last few years no case under the Suppression of Immoral Traffic in Women and Girls Act, 1956, has been registered in the district. Under the Act, no brothel house or place of ill-repute is allowed to be set up.

The reported cases of kidnapping and abduction were isolated in character, and not the work of any organised gangs. Most of the cases were the result of love affairs, the abducted females being the consenting parties.

Cheating.—The offence is not much common. The cheats remain on the look-out for persons of credulous nature, whose minds are worked upon with rosy assurances and under that spell they are made to part with cash and property. Unemployment and a general lack of scruples among the business community lead to cheating in various forms. This offence is bailable and compoundable. The aggrieved party, in the event of redress offered to it, prefers to compound the offence rather than pursue it. During the period 1955—69, the number of cases reported was the highest (78) in 1967. However, during this period the number of cases reported each year averaged 36.¹

Offences against local and special laws.—These offences comprise cases of public nuisance and those covered under the Indian Arms Act, 1878, the Punjab Excise Act, 1914 (including illicit distillation), the Opium Act, 1878, the Public Gambling Act, 1867, the Essential Commodities Act, 1955, the Indian Railways Act, 1890, the Prevention of Corruption Act, 1955, and the Defence of India Rules. Table XXXV of the Appendix gives data about the cases reported under these Acts from 1955 onwards. Of these, special mention needs to be made about the cases under Excise Act, Opium Act and Defence of India Rules. The background to the offences committed under the Excise Act and Opium Act has been explained with much detail under the heading 'Use of Intoxicants' in the Chapter on 'Other Social Services'. The figures pertaining to the cases under the Defence of India Rules for the three years, viz. 147 in 1964,

1. 35 cases in 1955; 33 in 1956; 38 in 1957; 28 in 1958; 14 in 1959; 15 in 1960; 27 in 1961; 19 in 1962; 36 in 1963; 42 in 1964; 34 in 1965; 65 in 1966 and 78 in 1967.

63 in 1965 and 75 in 1966, requires an explanation. During these years the prices of sugar, *shakkar* and *gur* had shown a sharp rise in this district as compared to the prices prevailing in the adjoining districts of the Uttar Pradesh. It was natural for the anti-social elements on either side of the State to be tempted to earn easy money by indulging in smuggling of these commodities. The district police curbed these nefarious activities by invoking the provisions of the Defence of India Rules and this accounts for the registration of a number of cases under the Defence of India Rules in 1964, 1965 and 1966.

Road traffic and transport.—The road traffic, besides the Indian Motor Vehicles Act, 1914, is regulated by several other Acts.¹ The incidence of motor vehicle accidents in the district has been on the increase. This is due to the increasing number of motor vehicles and other means of transport plying on the roads.

POLICE

Brief history.—The police is the guardian of law and order and as such it constitutes a vital organ of the government. The institution of police is not something new to India. But the police organisation, as it stands, is an inheritance from the British regime in the country. Towards the end of the 19th century, the police force in the Karnal district was controlled by a District Superintendent and the strength of the force as reported in the Police Report for 1889, was as follows :—

Class of police	Total strength	Distribution	
		Standing guard	Protection and detection
1. District Imperial	450	48	402
2. Municipal	153	—	153

The police force as reported in the Karnal District Gazetteer, 1918, was :

1. (i) Sections 279, 304 A, 337 and 338 of Indian Penal Code;
- (ii) The State Carriages Act XVI of 1861;
- (iii) The Hackney Carriages Act, 1879;
- (iv) The Police Act III of 1888;
- (v) The Prevention of Cruelty to Animals Act XI of 1890;
- (vi) The Punjab Municipal Act, 1911;
- (vii) The Punjab Motor Vehicles Taxation Act, 1925; and
- (viii) The Indian Motor Vehicles Act, 1939.

1 Superintendent of Police, 1 Assistant Superintendent (when available), 1 Deputy Superintendent of Police (at Kaithal), 1 Court Inspector, 1 Reserve Inspector, 4 Circle Inspectors (with headquarters at Karnal, Panipat, Kaithal and Thanesar), 31 Sub-Inspectors, 84 Head Constables, 573 Foot Constables and 3 Mounted Constables. There were 23 police stations including the one at the Railway Station, Karnal, besides three city police posts at Karnal, Panipat and Kaithal and one post at Pipli on the Grand Trunk Road.

The growth of urban areas, the effect of World War I, the new economic and political urges, the growth of nationalist movement and the British attempts to suppress it, resulted in increase of police force. Eventually in November 1925, Punjab Provincial Police Committee headed by Mr. Lumsden was appointed. The committee submitted its report in 1926. It contained *inter alia* recommendations about Karnal district as well. As a result of the recommendations of this committee various changes took place in the police set-up.

The duties of the police increased manifold as a result of the World War II. The police had to meet a new situation every now and then. After the War there was a shortage of essential commodities and the police force had to be employed to check black marketing. The political parties became very active and there were agitations for the attainment of independence. The visits of the British delegations to India for political settlement involved a big security question for the police.

The Independence of the country further increased the duties of the police force. Fresh burdens were thrown on it by expansion in social activities and branches of the public administration. While the responsibilities increased, the police force was not proportionately or adequately strengthened, nor were its salaries and conditions of work reviewed in the light

1. "There are town police strength in Karnal, Panipat and Kaithal. Panipat with 27,000 inhabitants is understaffed with only 40 constables for both watch and ward and for the work of the separate *thana* in the town, especially in view of communal difficulties. Karnal also has an inadequate force and we propose an increase of 10 constables in each town and of six constables in Kaithal.

"In addition to the two urban *thanas* in Karnal and Panipat, there are 20 rural *thanas* with an average area of over 200 square miles. Several of these are lightly worked and we suggest the abolition of the Singhaur *thana*, its jurisdiction being divided between Ladwa and Radaur. If this be accepted, we estimate the force necessary at 2 Inspectors, 30 Sub-Inspectors, 23 Assistant Sub-Inspectors, 78 Head Constables and 543 Constables as against the existing 2 Inspectors, 31 Sub-Inspectors, 87 Head Constables and 519 Constables."

of altering economic circumstances. It was finally in 1961 that the State Government constituted the Punjab Police Commission under the chairmanship of late Shri Mehr Chand Mahajan, retired Chief Justice of Supreme Court, to enquire into and report on the role of the police in the context of democratic rights consistent with the paramount security of the State; measures for controlling meetings, demonstrations and mobs; police-public co-operation; steps for improving the work of investigation and detection; staff position; emoluments and conditions of service; relations of the police with the magistracy; mutual obligations of the police and *panchayats*, etc. The recommendations of the Police Commission were made in May 1962 and are being implemented.

ORGANIZATION OF POLICE

For the purpose of police administration, the district falls in Ambala range, which is under the charge of a Deputy Inspector General of Police. In 1947, the district police was controlled by a Superintendent of Police who was assisted by 3 Deputy Superintendents of Police, 4 Inspectors, 39 Sub-Inspectors, 47 Assistant Sub-Inspectors, 115 Head Constables and 798 Constables. In 1970, the district police comprised one Superintendent of Police who was assisted by 5 Deputy Superintendents of Police, 4 Inspectors, 46 Sub-Inspectors, 58 Assistant Sub-Inspectors, 120 Head Constables, and 947 Constables. The details are given in Table XXXVI of Appendix. Village chowkidars or watchmen also assist the police.

There were 22 *thanas* or police stations and 8 police posts in 1970, a list of which has already been given in Chapter on 'General Administration'. There was also a Railway Police Station at Karnal with outposts at Kurukshetra and Panipat.

Civil police.—Civil police is detailed for duty at the police stations. Of the 22 police stations in the district, 3 were in urban and 19 in rural areas. Each of these was under the charge of a police officer, known as the Station House Officer assisted by one or more Second Officers, a Head Constable, a Moharrir or Clerk-Constable and a number of Constables. The Station House Officer is responsible for law and order and investigates offences occurring within his jurisdiction.

Armed police and mounted police.—This force is kept in the reserve police lines. The armed police is deployed for the protection of important vulnerable points and the mounted police is useful for general patrolling.¹

1. The buildings for the headquarters staff and the personnel of the Haryana Armed Police were under construction at Madhuban, near Karnal, in 1970.

Prosecution staff.—Sometime back the prosecution staff was drawn from the regular members of the police force who had passed law examinations from the Police Training School, but this wing has been re-organized and officers with legal qualifications are directly recruited to it. The Prosecution Branch at district level is under the charge of the Superintendent of Police.

Criminal Investigation Department.—The strength of the C.I.D. staff in the district is : Inspector 1, Sub-Inspector 1, Assistant Sub-Inspectors 4, Head Constables 6, and Constables 6. The district C.I.D. staff makes independent and secret enquiries on the directions received from the Deputy Inspector General of Police, C.I.D. The District Inspector of C.I.D. is required to liaison with the district police authorities.

Police wireless station.—The police wireless organisation provides the quickest means of transmission of messages and is the only dependable source when other means like telephone and telegraph have broken down. In the maintenance of law and order or during emergencies, *e.g.* floods, locust invasion, etc., the system plays a vital role. Armed Reserves can be rushed to a disturbed area and movements of dangerous criminals from one district to another can be conveyed forthwith. There is one police wireless station at the district headquarters at Karnal and one sub-station at Kaithal.

Railway police.—It is not allotted to any district in particular but is a part of a separate State Organization working under an Assistant Inspector General of Police. The circles of the Railway Police are formed according to the sections of railway lines and they are concerned with the prevention, detection and control of crimes committed in railway trains and within the railway premises. There is a Railway Police Station at Karnal with 2 outposts at Kurukshetra and Panipat.

Home Guards.—Keeping civil emergencies in view and appreciating the needs of the time, a voluntary organization known as Punjab Home Guards was started in 1960 in border districts and in all the important towns of the State. Since the creation of Haryana State, the Department of Punjab Home Guards has been re-christened as Home Guards, Haryana. Its constitution is still governed by the Punjab Home Guards Act, 1947 and the rules framed thereunder.

The overall charge of the district is with the District Commander Karnal, who is assisted by the Commander, Training Centre, Nilu Kheri (Nilo Kheri) and the Company Commanders at Karnal, Kaithal, Shahabad

(Shahbad) and Panipat. A company, which is under the charge of a Company Commander, usually consists of 110 volunteers. There were 25 companies in the district, 10 urban companies raised in 1961 and 15 rural companies raised in 1963. Three urban companies having been disbanded in 1968, their number came down to seven. These are located at Karnal (4), Panipat (1), Kaithal (1) and Shahabad (Shahbad) (1). The rural companies are located in each of the 15 blocks in the district. Urban companies are trained at the respective places of their location. For the rural wing, there is a training centre at Nilu Kheri (Nilo Kheri) and the training is completed at the centre by running camps. In 1970, there were 700 volunteers in urban companies and 1,492 volunteers in rural companies against an authorised strength of 770 and 1,650 respectively.

The trainees are trained in drill with and without arms, *lathi* drill, fire-fighting, first-aid, crowd control, *naka bandi*, maintaining essential services and in helping the civil authorities. They are also trained in using weapons, taking cover, judging distance, beat patrolling and performing general duties. An instructor has also been posted at Karnal for imparting training in civil defence to the general public and organisation of civil defence services in the town.¹

Every effort is made to raise the standard of the organization in keeping with its aims and objects. The Home Guards have discharged their duties efficiently on various occasions particularly at the time of Pakistani aggression in 1965, the General Elections in 1967 and 1972, Mid-Term Elections in 1968, Solar Eclipse Fair at Kurukshetra in 1968, and the All India Congress Committee Session at Faridabad (Gurgaon district) in 1969.

Village police.—For over a century the police functions at village level were performed by Zaildars, Sufaidposhes, Chowkidars and Inamkhors. The institution of *chowkidari* alone survives all the other institutions which were abolished in 1948. The Chowkidars report births and deaths in a *thana* fortnightly, give information of crime, keep surveillance over the bad characters residing in the village and report their movements. Besides attending to watch and ward duties, they generally assist the public officers on tours.

In the remote past, the village Chowkidar used to receive, as his

1. Considering the importance of the civil defence, the Company Commanders and Instructors receive training at the National Civil Defence College, and the National Fire Service College, Nagpur.

remuneration, a share from each cultivator's produce which was reckoned according to the number of hearths. Now the Chowkidars are paid by the Government.

Previously *thikar* Chowkidars were selected by lot from among the residents of the village ; those unwilling to serve were obliged to pay the cost of a substitute. These Chowkidars were provided only during an epidemic, outbreak of crime and emergencies. With the advent of democratic decentralisation, the *chowkidari* system, which was a sort of *shramdan* aimed at providing safety to person and property, has now become very weak and is not of much help in the field of watch and ward. People generally are averse to Thikri Pahara and are no longer enthusiastic. The Punjab Gram Panchayat Act, 1952, has however authorised *panchayats* to raise their own voluntary force for the purpose.

JAILS AND LOCK-UPS

District Jail.—Located, since 1871, on the Grand Trunk Road near the District Courts, Karnal, this had been a sub-jail before it was upgraded as district jail on May 8, 1967. It is under the charge of a Superintendent who is assisted by a Deputy Superintendent, two Assistant Superintendents, one Sub-Assistant Superintendent and other miscellaneous staff.

The authorised accommodation which previously had been for 180 prisoners and undertrials was increased to 400 after the sub-jail was raised to the status of district jail.¹ This jail is meant mainly for keeping undertrials in judicial custody till the decision of their cases. The offenders after their conviction are transferred to the Central Jail, Ambala and the District Jail, Rohtak. The juvenile delinquents below the age of 21 are transferred to the Borstal Jail, Hissar (Hissar). The prisoners except those convicted under the Railways Act², on their release, are given free railway passes for journey to their homes.

There is a separate ward for women prisoners. A female warder is deputed to look after them. The women ward is meant for those awaiting trial who on conviction are transferred to the Central Jail, Ambala.

The jail dispensary has a 5-bed ward for in-patients. Serious cases are sent for treatment to the Civil Hospital. Every care is taken for the sanitation and cleanliness of apartments and wards. A part-time Medical

1. The total population of the jail was 267 on March 31, 1970 and 265 on March 31, 1974.

2. The Indian Railways Act IX of 1890.

Officer and a whole-time dispenser attend to the patients. The Medical Officer is deputed from the Civil Hospital by the Chief Medical Officer, Karnal.

Welfare of prisoners.—The accent of modern prison system is more on reformation rather than punishment. Consequently, there is a significant change in outlook towards the welfare of prisoners and a number of facilities are now afforded to them. In pursuance of the Jails Reforms Committee's recommendations, not only the facilities of interviews with their relatives and writing to them have been liberalised, but also they have been provided with better clothing and utensils. They are allowed to supplement food and toilet requirements from their relatives and the jail canteen. The District Crime Prevention Society extends assistance to the needy prisoners for their daily requirements. To infuse a sense of responsibility and spirit of trust among the prisoners, they are associated with work connected with their own welfare through a *panchayati* system. This is working successfully and is of great value in the maintenance of discipline.

The visits, from time to time, of official and non-official visitors prove useful. These create a healthy atmosphere among the inmates who realise that despite their being behind the bars, they are cared for and not ignored. This produces confidence in them and promotes better discipline. These visits also serve as liaison between the jail administration and the prisoners. Their suggestions for the betterment of the prisoners are given due consideration.

The prisoners are taught the modern methods of agriculture, the use of implements, the latest varieties of seeds, fertilizers and insecticides on the 90-acre farm and 6-acre garden attached to the jail where a tractor has also been provided. The annual produce of this farm is worth about one lakh rupees. Besides agriculture, the prisoners are imparted training in the manufacture of phenyl, soap, weaving of *niwar* and durries. In this way they earn while they learn. This also inculcates in them the habit of working hard and collectively with a sportsman spirit.

Since only the undertrials are kept in this jail, the facilities and amenities provided to them cannot be on a large scale. However, efforts are made for their mental uplift and physical development so as to effect a change in their attitude and criminal tendencies. Arrangements exist for imparting elementary education to them. They also take advantage of jail library where they can read newspapers, periodicals and other books. A radio set has been provided by the District Crime Prevention Society.

The Welfare Officer of the jail, with the assistance of the Public Relations Department, arranges dramas and film shows for entertaining the prisoners.¹ Besides indoor games, outdoor games and sports are also arranged for them. The object of these reforms is that on release the prisoners go back to the society as useful citizens and civilised persons.

Sub-Jail, Panipat.—A subsidiary to the District Jail, Karnal, this sub-jail is located in the Industrial Area behind the Sub-Divisional Magistrate's Court at Panipat. Before being converted into sub-jail on April 1, 1962, its building was utilised as judicial lock up. The building has two rooms with an authorised accommodation for 14 prisoners. However, its population on an average remains 20 to 30 and only under trials are confined here.² The boundary wall of the sub-jail was constructed in 1968 while the administrative block and residential quarters in 1970. In 1970, the Sub-Divisional Magistrate acted as Superintendent of the sub-jail and was assisted by a Sub-Assistant Superintendent. A piece of land measuring 8 *kanals* and 10 *marlas* has been attached to this sub-jail where vegetables and fodder are grown and the prisoners acquire the skill of cultivation.

Police and judicial lock-ups.—An accused person is confined to a police lock-up when in police custody, to a judicial lock-up during trial and to a jail after conviction. Each of the 21 police stations in the district is provided with one male and one female police lock-up having a capacity of 8 and 4 persons respectively which at times is too small for the number of persons detained. None of the police lock-ups has the amenity of electrification.

As stated earlier, the District Jail, Karnal and the Sub-Jail, Panipat, serve as the judicial lock-ups. However, the undertrials are kept separate from the convicted persons, if any, undergoing imprisonment.

JUSTICE

There are three kinds of courts existing in the district, viz. civil, criminal and revenue.

CIVIL COURTS

In early 19th century conditions were very different. Civil suits were tried solely by the Sadar Amin at Panipat who adjudged cases according to Muhammadan law.³ The language of the courts was

1. A television set has also been provided in 1974.

2. The total population of the sub-jail was 14 on March 31, 1970 and 30 on March 31, 1974.

3. *Karnal District Gazetteer*, 1892, p. 63.

Persian till 1836. No suits against Government were admitted in the courts of the Delhi territory, and no stamps were affixed on petitions till, in 1830, Regulation X of 1829 was extended to the courts by proclamation. Sale of land was not permitted without the consent of the whole village, except with the express sanction of the Governor-General in Council.

During the latter part of the 19th century, a Munsif was appointed in the district who had jurisdiction within Karnal and Panipat tahsils and in *pargana* Asandh of the Kaithal tahsil. He held his court alternately, for two months at Karnal and two months at Panipat. Besides, the Honorary Magistrates, conferred with various powers, exercised magisterial jurisdiction within the limits of their respective jagirs and in the towns of Kaithal and Karnal. By the beginning of the present century, the civil judicial work was placed under the supervision of a District and Sessions Judge posted at Karnal. He had under him two Subordinate Judges stationed at Karnal and two Munsifs stationed one each at Karnal and Kaithal respectively. Practically, all the civil work was done by them, but a few civil suits were sent to the Sub-Divisional Officer, Kaithal. The Honorary Magistrates continued to have jurisdiction in various parts of the district for civil judicial work.

Till the separation of the judiciary from the executive in 1964, the administration of civil judicial work in the district was handled by the District and Sessions Judge, Karnal, who was assisted by the Senior Sub-Judge, Karnal and three Sub-Judges, one each at Karnal, Panipat and Kaithal. An Additional Sub-Judge III Class was appointed at Karnal in 1965. After the separation of the two functions, the Senior Sub-Judge and Sub-Judges 1st Class have been invested with the powers of a Judicial Magistrate 1st Class. The Additional Sub-Judge III Class enjoys the powers of Judicial Magistrate II Class.

Senior Sub-Judge, Karnal.—He performs many functions of a judicial nature. He is appellate authority in Small Cause cases of money suits not exceeding Rs. 100, land suits not exceeding Rs. 250, and unclassified suits not exceeding Rs. 500 in value. He is also a Subordinate Judge 1st Class and as such can hear suits of any value. He is Rent Controller under the East Punjab Urban Rent Restriction Act, 1947. He can try cases under the Guardian and Wards Act, 1890, and the Provincial Insolvency Act, 1920. He is Commissioner under the Workmen's Compensation Act, 1923, and the Payment of Wages Act, 1936. He acts as Tribunal under the Displaced Persons (Debt Adjustment) Act, 1951.¹ He is a Judge of the Small Cause

1. He was also a member of the Tribunal constituted under the Defence of India Act, 1962, which ceased functioning in 1968.

Court under the Provincial Small Cause Courts Act, 1887.

He hears transfer applications in *panchayat* cases, and revision applications under the Punjab Gram Panchayat Act, 1952. He can hear applications under the Indian Succession Act, 1925, and dispose of cases under the Hindu Marriage Act, 1955. Besides, he is in charge of the process serving establishment.

Sub-Judge 1st Class.—The Subordinate Judge of the First Class has jurisdiction to try civil suits irrespective of their valuation. He can exercise the powers and functions of the Rent Controller under the East Punjab Urban Rent Restriction Act, 1949. He is also competent to dispose of a petition under the Hindu Marriage Act, 1955, when it is transferred to him by the District Judge. At the tahsil headquarters, the Sub-Judge with First Class powers is also competent to entertain a petition for obtaining a Succession Certificate under the Indian Succession Act, 1925.

Additional Sub-Judge III Class.—He exercises jurisdiction in cases of which the value does not exceed Rs. 5,000.

CRIMINAL COURTS

In the early 19th century murder cases were tried at Delhi; and the bodies of criminals executed were left hanging on the gibbets. This practice continued till 1838. Flogging was abolished in 1825. The tract law was, however, rigorously enforced, holding the village to which the thieves were traced and even that in which the robbery took place, if connivance was suspected, responsible for the full value of the stolen property; and though this practice was discontinued on the introduction of the Regulations in 1832, yet the Court of Directors expressly ordered its revival on the ground of the number of feudatory chiefs whose territories bordered on the tract. The police establishment was notoriously corrupt. During the five years from 1828 to 1832, the average number of cases brought into court, excluding assaults, was only 628 for the whole of Panipat district. In 1879, the corresponding number for a little large population was 1,750. The police duties in large towns were discharged by watchmen, while in villages the people themselves were responsible for these duties. For the jagir holdings, the police was furnished by the jagirdars. There were no headquarters of the district in 1827, and the Magistrate was always moving about and carrying his jail with him, the prisoners sleeping in the open under nothing but a guard.¹

1. *Karnal District Gazetteer*, 1892, p. 63.

By the beginning of the present century, the criminal judicial work came to be supervised by the District and Sessions Judge, Karnal. He was assisted by the District Magistrate, the Senior Sub-Judge and the Sub-Divisional Officer, Kaithal, 2 Extra Assistant Commissioners with Class I powers, 4 Tahsildars with Class II powers and 6 Naib-Tahsildars with Class III powers. The Junior Sub-Judge stationed at Karnal was also allowed to perform criminal work during the month of September. Besides, the Honorary Magistrates, conferred with various powers, exercised criminal jurisdiction in different parts of the district.¹

In 1963, the organisation of criminal justice was controlled by the District Magistrate, Karnal, who was assisted by an Additional District Magistrate; three Magistrates Ist Class at Karnal; General Assistant, Karnal; Sub-Divisional Officers (Civil) at Panipat, Kaithal and Thanesar; and Resident Magistrates at Panipat and Kaithal.

With the separation of the judiciary from the executive in 1964, powers of the District Magistrate, on the criminal side, were vested in the Chief Judicial Magistrate under the control of the District and Sessions Judge, Karnal. There are in all 7 courts on criminal side, viz. Chief Judicial Magistrate, Karnal, 2 Judicial Magistrates Ist Class, Karnal, Additional Judicial Magistrate Ist Class, Karnal, 2 Judicial Magistrates Ist Class at Kaithal, and Judicial Magistrate Ist Class, Panipat. The Chief Judicial Magistrate supervises the criminal judicial administration of the district. He is invested with exclusive powers to try all cases of the entire district under the Essential Commodities Act in a summary manner. He allots the police stations to the Judicial Magistrates with the approval of the District and Sessions Judge. All the Judicial Magistrates try cases under the Indian Penal Code, the Punjab Excise Act, 1914 and other special Acts. The Judicial Magistrates Ist Class, Karnal and Kaithal are also invested with the powers to try certain offences in a summary way. Challans are put in by the police in the courts of Judicial Magistrates also called Illaqa Magistrates who also watch the investigation of criminal cases. A case generally takes two months for trial but cases of complicated nature with long lists of prosecution witnesses and cases of inter-district or inter-State nature generally take a longer time.

All the Judicial Magistrates have been invested with the powers of Sub-Judge with varying jurisdiction and *vice versa*.

1. *Karnal District Gazetteer*, 1918, p. 142.

The civil and criminal work has increased considerably in recent years. Table XXXVII of Appendix shows that about 1,500 civil suits more were instituted in 1969 as compared to the figure of 1968. The figure for the first six months of 1970 shows that there is likely to be cent per cent increase in 1970 over the figure of 1968. The increased number of private complaints shows that people are now becoming more and more aware of their rights and the remedies available to them. While this has led on the one hand to the institution of an increasing number of criminal cases, there has also been a corresponding increase in the institution of police challans.

After the passing of the Punjab Gram Panchayat Act, 1952, some of the functions of the civil, criminal and revenue courts have been made over to the *panchayats*. Where cases lie in the exclusive jurisdiction of the *panchayats*, their cognizance by other courts is barred. The Chief Judicial Magistrate is empowered to revise their decisions and he in turn can delegate these powers to the Illaqa Magistrate. The *panchayats* being elected bodies, however, do not generally consist of persons having adequate knowledge of law. The usual formalities of procedure are thus conspicuous by their absence in the trial of cases by the *panchayats*.

REVENUE COURTS

The Collector is the highest revenue judicial authority in the district and an appeal or revision from his orders lies to the Commissioner and against the orders of the Commissioner an appeal or revision lies to the Financial Commissioner. The Government has invested the Sub-Divisional Officers (Civil) in the district with the powers of Collectors. The General Assistant, the Assistant Commissioners/Extra Assistant Commissioners are Assistant Collectors of the first grade. However, the Tahsildars assume powers of an Assistant Collector of the first grade in partition cases.

BAR ASSOCIATIONS

There is a Bar Association at the district headquarters and separate Bar Associations at Kaithal, Panipat and Thanesar. There is no record to show when the District Bar Association was founded.¹ Its strength was 48 before the Partition; it rose to 119 in 1962 and

1. From the entries in the Punjab Gazettee, dated June 4, 1903, it appears that Mir Usaf Ali was admitted as pleader II grade on August 28, 1876.

163 in 1970. The Karnal Bar has spacious building with grassy plots. A few particulars about the other Bar Associations are given below :

Name	Year of establishment	Membership in 1970
Bar Association, Kaithal	1905-06	60 (including 3 pleaders)
Bar Association, Panipat	1927	51
Bar Association, Thanesar	1962	8

A legal practitioner entitled to practise as a lawyer must become a member of the Bar Association. The Association promotes the administration of law and justice and protects and safeguards the rights and privileges of the members belonging to the legal profession in general and the members of the Association in particular. These Associations function under the rules framed by the Punjab and Haryana High Court.

The recent legislation like Agrarian and Rent Restriction laws has led to an increase in litigation thus providing better chances for the young-recruits entering the legal profession.

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Chapter XIII

OTHER DEPARTMENTS

The organisational set-up, staff, duties and functions of the departments not mentioned in other chapters are briefly given here.

PUBLIC WORKS DEPARTMENT

The three wings of the Public Works Department located in the district are : (i) Public Health Engineering (ii) Buildings and Roads and (iii) Irrigation.

(i) PUBLIC HEALTH ENGINEERING

Public Health Division, Karnal.—This division, which has been functioning since 1956, is headed by an Executive Engineer and functions under the overall control of the Superintending Engineer, Ambala Cantt. The Executive Engineer of the division is assisted by three Sub-Divisional Engineers, two stationed at Karnal and the third at Kurukshetra.¹ This division undertakes the execution of public works relating to drainage other than land drainage, sewerage, water-supply and sanitation in rural and urban areas. It provides public health amenities in Government buildings and is also responsible for the maintenance of public health engineering installations in public buildings, rural areas and in the towns where the municipal committees desire the Government to maintain such facilities on their behalf.

During recent years, the division has executed a number of public health engineering works in Karnal, Kaithal, Pehowa, Shahabad (Shahbad), Thanesar, Kurukshetra, Nilu Kheri (Nilo Kheri) and Panipat and has provided water-supply and sewerage facilities in Kurukshetra University, Regional Engineering College, Kurukshetra and Sainik School, Kunjpura. This division also looks after the water-supply arrangements during the solar eclipse fairs at Kurukshetra.

1. (a) A new sub-division was formed at Kaithal in April 1970, for the execution of the works of the Kaithal tahsil.

(b) With the formation of the new district of Kurukshetra on January 23, 1973, a separate Executive Engineer has been made in-charge of the Kurukshetra Division with one Sub-Divisional Engineer each at Kurukshetra and Pehowa and two at Kaithal. The Executive Engineer at Karnal also has four Sub-Divisional Engineers under him, viz. three at Karnal and one at Panipat.

(ii) BUILDINGS AND ROADS

Karnal Circle, Karnal.—The roads and buildings in the district were formerly under the charge of a Provincial Division at Karnal (formed in 1955). Another division named Construction Division was opened at Karnal on January 7, 1969, which was later shifted to Panipat on August 11, 1969. A full circle for P.W.D. (B & R) Works at Karnal and one more division at Kaithal were opened on July 23, 1969. This circle supervises the work of four divisions located one each at Karnal, Panipat, Kurukshetra and Kaithal. The work of electric installations in the Government buildings is attended to by the Karnal Electrical Sub-Divisions No. I and No. II located at Karnal.¹

A special construction division, viz. Kurukshetra Construction Division² was created in 1964 for the construction of the buildings of Regional Engineering College at Kurukshetra, etc.

For proper upkeep of the road building machinery, a Mechanical Division was opened at Karnal on August 19, 1969. A Mechanical Sub-Division was also opened at Karnal on October 6, 1969.³

(iii) IRRIGATION

A brief description of the various offices of the Irrigation Department located in the district is given below :

Karnal Division, Western Jumna (Yamuna) Canal, Karnal.—An Executive Engineer holds charge of this division under the Superintending Engineer, Western Jumna (Yamuna) Canal, East Circle, Delhi. He is assisted by three Sub-Divisional Officers namely, Karnal Sub-Divisional Officer, Nardak Sub-Divisional Officer and Gohana Sub-Divisional Officer. A part of the Rohtak district is also included in this division.⁴

This division is concerned with the irrigation works relating to the Main

1. Karnal Electrical Sub-Division No. II was shifted to Chandigarh in August 1970 and the other one was called Karnal Electrical Sub-Division. It was raised into a division on August 29, 1972. The headquarters of the circle under a Superintending Engineer were also located at Karnal on September 16, 1970. It also supervises the work of all other divisions which are functioning in other districts.

2. This division was closed on August 16, 1972, and its works entrusted to Kurukshetra Provincial Division.

3. A Mechanical Circle has also been located at Karnal since June 25, 1971.

4. Irrigation division does not coincide with the civil district but is determined by the irrigation channels which it administers.

Branch of Western Jumna (Yamuna) Canal, Chautang Canal System, Bazida Distributary, Nardak Distributary and Gohana and Israna Distributaries.

Pehowa Division, Kaithal¹.—This division was opened in 1954 at Ambala but shifted to Kaithal in 1956. The Executive Engineer in charge of this division functions under the Superintending Engineer, Ambala Bhakra Canal Circle, Chandigarh. This division which is sub-divided into 4 sub-divisions, viz. Sarusti (Sarasvati) Sub-Division, Pehowa Sub-Division, Jotisar Sub-Division and Jhansa Sub-Division, is mainly concerned with the development of canal irrigation and drainage works relating to Narwana Branch of First Bhakra Main Line and the Sarusti (Sarasvati) Canal system. It also maintains flood protection bunds for the safety of canals.

Karnal Drainage Division, Karnal.—The origin of this division may be traced to Drainage Division No. III which was established in 1957 at Karnal for providing suitable drains to overcome the difficulties created by the floods every year. In October 1961, the administrative control of Drainage Division No. III was transferred from the Western Jumna (Yamuna) Canal East Circle, Delhi, to the Drainage Circle, Karnal. In 1964, the Dhanaura Drainage Division was closed and amalgamated with Drainage Division No. III and its name was changed to Karnal Drainage Division, Karnal. The purpose of this division was to complete the main schemes already undertaken by Drainage Division No. III and Dhanaura Drainage Division besides some other works including measures to check floods and water-logging in the Karnal and Ambala districts. At that time it consisted of three sub-divisions namely, Karnal Drainage Sub-Division, Karnal; Jagadhri Drainage Sub-Division, Yamunanagar; and Samalkha Drainage Sub-Division, Panipat. Subsequently Samalkha Drainage Sub-Division was merged into Karnal Drainage Sub-Division and Jagadhri Drainage Sub-Division was transferred to Ambala Drainage Division, Ambala. In 1965, on the closing down of Barara Drainage Division, Gurgaon, Palwal Sub-Division was transferred to the Karnal Drainage Division. In November 1966, works of bunds along the Yamuna from Dhanaura to Sanauli bund (near Panipat) were transferred to this division from Karnal Division, Western Jumna (Yamuna) Canal, Karnal. For the upkeep and maintenance of these works, a new Bund Sub-Division has also been opened. Thus there are now three sub-divisions executing the works pertaining to drains and bunds, viz. Karnal Drainage Sub-Division, Karnal; Palwal Drainage Sub-Division, Palwal; and Bund Sub-Division, Karnal.

1. Since the bifurcation of the Karnal district on January 23, 1973, this division has been included in the Kurukshetra district.

The Executive Engineer in charge of this division is under the control of the Superintending Engineer, Drainage Circle, Karnal. For draining flood water, this division has taken up a number of schemes namely, Re-modelling Main Drain No. 2 ; Re-modelling Indri Drain, Nisang Drain, Safidon Drain, Sarasvati Drain and construction of bunds near Kunjpura along the Yamuna.

Mechanical Drainage Division, Karnal.—The Executive Engineer in charge of this division is under the control of the Superintending Engineer, Drainage Circle, Karnal. He is assisted by three Sub-Divisional Officers, viz. Mechanical Drainage Sub-Divisions, Kaithal¹, Karnal, and Hodal² (Gurgaon district). This division was opened in March 1961, to assist in mechanical jobs connected with the execution of allied work, flood control and drainage works schemes under execution of the Drainage Circle, Karnal.

Investigation Drainage Division, Karnal.—This division, which was opened in November 1961, is headed by an Executive Engineer under the Superintending Engineer, Drainage Circle, Karnal. It was transferred to the Project Drainage Circle, Chandigarh, on February 28, 1963. This division finds out ways and means of checking and controlling floods in the Western Jumna (Yamuna) Canal tract of the Karnal, Rohtak and Hisar (Hissar) districts.

Tubewell Division, Karnal.—The Executive Engineer in charge of this division is under the control of the Superintending Engineer, Ambala Bhakra Canal Circle, Chandigarh. He is assisted by five Sub-Divisional Officers, one each at Karnal, Panipat and Kurukshetra³, Ambala and Yamunanagar (Ambala district). The main function of the division is to distribute tubewell water among the cultivators and to maintain the existing tubewells in running condition.⁴

A subsequent significant achievement of the Irrigation Department is the construction of Augmentation Canal which was commissioned in January 1973. A write-up on this canal has been appended to Chapter IV on

1. In the Kurukshetra district since January 23, 1973.

2. Transferred to Feeder Gurgaon Circle, Delhi, on December 1, 1968. A new Mechanical Drainage Sub-Division of Drainage Circle, Karnal, with headquarters at Rohtak was opened on November 11, 1969.

3. In the Kurukshetra district since January 23, 1973.

4. Besides these offices, some more were established at Karnal in connection with the construction of the Augmentation Canal. The canal having been completed, most of these offices were wound up. However, two sub divisions, viz. Augmentation Canal Sub-Division No. III and No. IV, have been functioning at Karnal since March 1, 1974. Details about the Augmentation Canal have been appended to the Chapter on 'Agriculture and Irrigation'.

Agriculture and Irrigation. However, the details of the establishment engaged for its construction from time to time are given below:

Augmentation Canal Circle No. I, Ambala (from February 11, 1971 to February 28, 1974)

- Divisions: 1. Augmentation Canal Division No. I, Yamuna Nagar
2. Augmentation Canal Division No. II, Karnal
3. Augmentation Canal Division No. III, Yamuna Nagar
4. Augmentation Mechanical Division No. I, Yamuna Nagar

- Sub-Divisions: 1. Augmentation Canal Sub-Division No. I, Yamuna Nagar
2. Augmentation Canal Sub-Division No. II, Yamuna Nagar
3. Augmentation Canal Sub-Division No. III, Yamuna Nagar
4. Augmentation Canal Sub-Division No. IV, Yamuna Nagar
5. Augmentation Canal Sub-Division No. V, Karnal
6. Augmentation Canal Sub-Division No. VI, Karnal
7. Augmentation Canal Sub-Division No. VII, Karnal
8. Augmentation Canal Sub-Division No. VIII, Karnal
9. Augmentation Canal Sub-Division No. IX, Yamuna Nagar
10. Augmentation Canal Sub-Division No. X, Yamuna Nagar
11. Augmentation Canal Sub-Division No. XI, Yamuna Nagar
12. Augmentation Canal Sub-Division No. XII, Yamuna Nagar
13. Augmentation Mechanical Sub-Division No. I, Yamuna Nagar
14. Augmentation Mechanical Sub-Division No. II, Yamuna Nagar
15. Augmentation Mechanical Sub-Division No. III, Yamuna Nagar
16. Augmentation Mechanical Sub-Division No. IV, Yamuna Nagar
17. Augmentation Mechanical Sub-Division No. V, Yamuna Nagar

Augmentation Canal Circle No. II, Karnal (from June 6, 1971 to August 16, 1973)

- Divisions:** 1. Augmentation Canal Division No. IV, Karnal
 2. Augmentation Canal Division No. V, Karnal
 3. Augmentation Canal Division No. VI, Karnal
 4. Augmentation Mechanical Division No. II, Karnal

- Sub-** 1. Shahpur Augmentation Sub-Division, Karnal
Divisions: 2. Makhu Majra Sub-Division, Karnal
 3. Subri Augmentation Sub-Division, Karnal
 4. Rasulpur Augmentation Sub-Division, Karnal
 5. Shakhupura Augmentation Sub-Division, Karnal
 6. Madhuban Augmentation Sub-Division, Karnal
 7. Bijna Augmentation Sub-Division, Karnal
 8. Budhanpurabad Augmentation Sub-Division, Karnal
 9. New Colony Sub-Division, Karnal
 10. Survey Sub-Division, Karnal
 11. Augmentation Material Sub-Division, Karnal
 12. Link Channel Sub-Division, Karnal
 13. Naval Augmentation Mechanical Sub-Division, Karnal
 14. Gharaunda Augmentation Mechanical Sub-Division Gharaunda
 15. Baragaon Augmentation Mechanical Sub-Division, Karnal
 16. Stores Procurement and Workshop Sub-Division, Karnal

Establishment for Augmentation Canal from March 1, 1974

Circle: Sutlej Yamuna Link Circle, Ambala

Division: Augmentation Canal Division, Yamuna Nagar

- Sub-** 1. Augmentation Canal Sub-Division No. I, Yamuna Nagar
Divisions: 2. Augmentation Canal Sub-Division No. II, Yamuna Nagar
 3. Augmentation Canal Sub-Division No. III, Karnal
 4. Augmentation Canal Sub-Division No. IV, Karnal

HARYANA STATE ELECTRICITY BOARD

The following offices¹ under the administrative control of the Superintending Engineer, Haryana State Electricity Board, Karnal, are functioning in the

1. Except the Operation Division, Kurukshetra, which functions under the Superintending Engineer, Operation Circle, Chandigarh.

district for the distribution of electricity to domestic, commercial, agricultural, industrial and other types of consumers and also for the maintenance and construction work of electricity lines and other installations:—

Karnal City Division.—This division was established as the 'Karnal Operation Division' in February 1953, and functioned under the Punjab Public Works Department, Electricity Branch. Later on its control was transferred to the Punjab State Electricity Board on its establishment in 1959.¹

Under the charge of an Executive Engineer, this division is sub-divided into 5 sub-divisions, headed by the Assistant Engineer Commercial, Karnal; the Assistant Engineer Technical (Local), Karnal; the Assistant Engineer, Transmission Lines and Sub-Station Engineer, Karnal; the Assistant Engineer, Technical (Suburban), Karnal; and the Assistant Engineer Construction-cum-Augmentation Sub-Division, Karnal.

Suburban Division, Karnal.—This division, under the charge of an Executive Engineer, was created on August 12, 1967. The offices under the control of this division are : Operation-cum-Construction Sub-Division, Jundla; Operation Sub-Division, Nilu Kheri (Nilo Kheri) with a sub-office at Tirawari (Taraori); Operation Sub-Division, Indri; Operation Sub-Division, Nisang; Construction Sub-Division, Nisang; and Construction Sub-Division, Indri.

Operation Division, Kurukshetra.—This division was established on January 29, 1968, and is under the control of an Executive Engineer. The offices under the control of this division are: Kurukshetra Operation Sub-Division; Pipli Sub-Division with sub-office at Amin; Ladwa Sub-Division with sub-offices at Udana and Ramsaran Mazra; Construction Sub-Division, Ladwa; Operation-cum-Construction Sub-Division, Thanesar with sub-office at Kirmach; Construction Sub-Division, Pipli; and Assistant Engineer Transmission Lines and Sub-Station Engineer, Pipli.

City Division, Panipat.—Under the charge of an Executive Engineer, this division has been sub-divided into four sub-divisions headed by the Assistant Engineer Commercial, the Assistant Engineer Technical I, the Assistant Engineer Technical II Suburban, and the Assistant Engineer Construction and Augmentation Sub-Division. All these Sub-Divisions are located at Panipat.

1. Consequent upon the creation of the new State of Haryana, the Haryana State Electricity Board was formed on April 1, 1967 and began its operation on May 2, 1967. Prior to this, the Punjab State Electricity Board functioned as a common board for both the States, viz. Punjab and Haryana.

Suburban Division, Panipat.—This division is under the charge of an Executive Engineer. Six sub-divisions under its control are: Operation-cum-Construction Sub-Division, Israna; Operation-cum-Construction Sub-Division, Matlauda; Samalkha Sub-Division; Attached Officer and Sub-Divisional Officer Transmission Lines Sub-Division, Panipat; Operation-cum-Construction Sub-Division, Asandh; and Gharaunda Sub-Division.

Kaithal Division, Kaithal.—This division was created on July 31, 1968 and is under the charge of an Executive Engineer. The offices under the control of this division are: Kaithal City Sub-Division; Pehowa Sub-Division;¹ Suburban Sub-Division, Kaithal; Operation-cum-Construction Sub-Division, Pundri; Construction Sub-Division, Pehowa; Construction Sub-Division, Kaithal; Assistant Engineer Transmission Lines and Sub-Station Engineer Sub-Division, Kaithal; and two sub-offices at Dhand under Pehowa Sub-Division and Chika under Suburban Sub-Division, Kaithal.

Maintenance and Test Sub-Division, Karnal.—This sub-division is under Karnal Circle and looks after the maintenance of supply system in the Circle.

Besides these six divisions functioning under the Superintending Engineer, Karnal, there is another divisional office (Shahbad Division) at Shahabad (Shahbad) which is under the Superintending Engineer, Chandigarh. Two of its sub-divisions, viz. Shahbad Sub-Division and Operation-cum-Construction Sub-Division, Ismailabad are located in the Karnal district whereas the remaining sub-divisions and sub-offices are located in the Ambala district.

In addition to one 220 kv. grid sub-station at Panipat, there are four 66 kv. grid sub-stations at Indri, Shahabad (Shahbad), Karnal and Pipli, and fifteen 33 kv. grid sub-stations at Ladwa, Pipli, Bhor, Dhand, Kaithal, Shahabad (Shahbad), Kurukshetra, Pehowa, Kurali, Nisang, Samalkha, Ismailabad, Nilu Kheri (Nilo Kheri), Gharaunda and Chika.

The progress about rural electrification in the Karnal district has been discussed at the end of this chapter.

CO-OPERATIVE DEPARTMENT

This department is represented by the Deputy Registrar, Co-operative Societies, Karnal, and two Assistant Registrars—one at Karnal and the other

1. A new division has been created at Pehowa on October 3, 1972, with five sub-divisions, viz. (i) Operation Sub-Division, Pehowa, (ii) Suburban Operation Sub-Division, Pehowa, (iii) Operation Sub-Division, Dhand, (iv) Operation-cum-Construction Sub-Division, Ismailabad, and (v) Assistant Engineer Transmission Lines and Sub-Station Engineer Sub-Division, Pehowa.

at Kaithal. The post of the Deputy Registrar was sanctioned in June 1967, when Intensive Agricultural District Programme was extended to Karnal by the Government of India. The Deputy Registrar is under the administrative control of the Director of Agriculture, Haryana. The Assistant Registrar, Co-operative Societies, Karnal, has his jurisdiction over the Karnal and Panipat tahsils whereas the co-operative societies in the Kaithal and Thanesar tahsils function under the control of the Assistant Registrar at Kaithal. Two more Assistant Registrars, namely Assistant Registrar, Co-operative Societies, Milk Supply, and Assistant Registrar, Co-operative Societies, Fertilizers, have started functioning at Karnal since July 1968 and October 1968 respectively. The former looks to the organisation and supervision of the Dairy and Milk Supply Societies and the latter to the Marketing Societies.¹

The Assistant Registrars are entrusted with the healthy growth of co-operative movement. They arrange for the agriculturists, through Central Co-operative Banks, Land Mortgage Banks, Agricultural Credit Societies, etc., adequate and timely supply of short, medium and long term credit and agricultural requisites, such as chemical fertilizers, improved seeds, insecticides and pesticides. The produce is routed through the marketing co-operatives so as to ensure better remunerative prices to the agriculturists. Besides, consumer goods, e.g. sugar, foodgrains, kerosene oil, etc., are also arranged for them through a net work of village service co-operatives.

1. After the bifurcation of the Karnal district on January 23, 1973, the Co-operative Department has the following organisational set-up in the Karnal and Kurukshetra districts:—

Karnal district

1. Deputy Registrar, Co-operative Societies, (Intensive Agricultural District Programme), Karnal
2. Assistant Registrar, Co-operative Societies, Karnal
3. Assistant Registrar, Co-operative Societies, Panipat
4. Assistant Registrar, Milk Supply Societies, (Intensive Cattle Development Programme), Karnal
5. Industrial Assistant Registrar, Co-operative Societies, Karnal

Kurukshetra district

1. Assistant Registrar, Co-operative Societies, Kaithal
2. Assistant Registrar, Milk Supply Societies, (Intensive Cattle Development Programme), Kurukshetra

The jurisdiction (general line) of the Deputy Registrar, Karnal, extends to the Karnal and Kurukshetra districts whereas the Deputy Registrar, Industrial at Chandigarh and Deputy Registrar, Milk Supply at Chandigarh have the whole of Haryana State under their jurisdiction for the respective type of societies.

DEPARTMENT OF WELFARE OF SCHEDULED CASTES AND BACKWARD CLASSES

This department is represented by the District Welfare Officer for Scheduled Castes and Backward Classes who is assisted by five Tahsil Welfare Officers, one in each tahsil, and the Male and the Lady Social Workers with Lady Attendants working in the community centres in the district.¹ The main functions of this office include creating public opinion against untouchability and to adopt measures for the welfare of Scheduled Castes, Vimukat Jatis and Other Backward Classes.²

The Male Social Workers hold adult classes and deliver lectures against the evil practice of untouchability and also work for the uplift of the Harijans. This work is intensively carried out through the welfare community centres located at Asandh, Dhons (tahsil Kaithal), Jundla, Shamgarh, Samana Bahu (tahsil Karnal), Israna (tahsil Panipat) and Radaur (tahsil Thanesar).

The Lady Social Workers hold sewing and *balwadi* classes and arrange *sat sangs* in the community centres. They deliver lectures to Harijan women on the care of babies and general cleanliness. Besides, they visit Harijan *bastis* and create a public opinion among the residents to the effect that they should observe no distinctions even among themselves.

The Lady Attendants are trained Dais and provide maternity aid.

FINANCE DEPARTMENT

The district treasury is under the control of a Treasury Officer, assisted by three Assistant Treasury Officers (one each for the Sub-Treasuries at Panipat,

1. After bifurcation of the Karnal district on January 23, 1973, the work of this department in the newly created Kurukshetra district comprising the three tahsils of Kaithal, Gula (Guhla) and Thanesar, is looked after by a separate District Welfare Officer for Scheduled Castes and Backward Classes.

2. For details about schemes for their welfare and uplift, the Chapter on 'Other Social Services' may be seen.

Thanesar and Kaithal).¹ His threefold functions comprise (a) receipt of revenue including sale of stamps on behalf of Central and State Governments; (b) disbursement of bills of pay and allowances of Government employees, bills of contingencies, grants-in-aid, scholarships and pensions including military pensions; and (c) maintenance of accounts pertaining to (a) and (b).

The cash transactions of the treasury and sub-treasuries are conducted through the branches of the State Bank of India at Karnal, Kaithal, Panipat and Thanesar.

The district treasury was previously under the charge of an Extra Assistant Commissioner (Revenue Department) who could not obviously devote full attention to this job, being entrusted with magisterial work in addition to treasury duties. Under the scheme of Reorganisation of Treasuries, introduced in December 1955, the district treasury came under the administrative control of the Finance Department and a whole-time Treasury Officer, belonging to the Punjab (now Haryana) Finance and Accounts Service cadre and well² versed with the accounting procedure, was appointed for efficient working of the treasury and maintenance of its accounts.

PUBLIC RELATIONS DEPARTMENT

This department is represented by the District Public Relations Officer who maintains a constant liaison with the Press and the public in general for

1. After the bifurcation of the Karnal district on January 23, 1973, the Finance Department has the following organisational set-up in the Karnal and Kurukshetra districts:—

Karnal district

The District Treasury at Karnal is under the control of a Treasury Officer assisted by two Assistant Treasury Officers, one each for the Sub-Treasuries at Panipat and Tirawari (Taraori). The cash transactions of the treasury and sub-treasuries are conducted through the branches of the State Bank of India at Karnal, Panipat and Tirawari (Taraori).

Kurukshetra district

Besides the District Treasury at Kurukshetra, there is another full-fledged Treasury at Kaithal. The Treasury Officer, Kurukshetra is assisted by two Assistant Treasury Officers, one each for the Sub-Treasuries at Shahabad (Shahbad) and Ladwa. The cash transactions of the treasury and sub-treasuries are conducted through the branches of the State Bank of India at Kurukshetra, Shahabad (Shahbad) and Ladwa. The Treasury Officer, Kaithal is also assisted by two Assistant Treasury Officers, one each for the Sub-Treasuries at Pehowa and Gula (Guhla). The cash transactions of the Kaithal Treasury are conducted at the State Bank of India, Kaithal, and of Pehowa Sub-Treasury at State Bank of Patiala, Pehowa, while Gula (Guhla) is a non-banking sub-treasury.

putting across the Government point of view. He also keeps the Government informed of public reactions to its plans and policies and conveys public grievances to the district and State authorities.

The District Public Relations Officer is assisted by the Field Publicity Staff including a Drama Party, a Bhajan Party and a Mobile Cinema Unit. He maintains an Information Centre at the district headquarters and also looks after tourism and cultural affairs. He distributes Government publicity literature, organises public meetings, conferences, exhibitions, film and drama shows. He is in charge of the Community Listening Scheme under which radio sets have been allotted to *panchayats*, co-operatives and schools. The radio mechanics under him are responsible for their proper maintenance. Radio repair workshops have been established at all the tahsil headquarters.

FIRE FIGHTING DEPARTMENT

Although there is a Fire Officer stationed at Chandigarh for the State as a whole, no such department exists at the district level. The administrative control of the fire stations rests with the municipal committees concerned. The Fire Officer, Haryana, advises them on technical matters and also assists them by providing equipment out of the grant-in-aid. In the Karnal district a fire brigade is maintained only by the Municipal Committee, Karnal, and its services are made available to the whole of the district.

FOOD AND SUPPLIES DEPARTMENT

This department is represented by the District Food and Supplies Controller, who is assisted by a District Food and Supplies Officer and five Assistant Food and Supplies Officers. His duties include the procurement of foodgrains and arranging their despatches to other States and deficit areas in the State, looking after proper storage of the stocks of foodgrains kept in Provincial Reserve besides arranging for their distribution and the distribution of sugar, kerosene oil, cement, coal/coke, vegetable ghee, etc., at reasonable/control prices through fair price shops. These activities are regulated/carried out through various control/licensing orders issued by the Food and Supplies Department mainly under the Essential Commodities Act, 1955.

There is a permanent barrier at Sanauli (tahsil Panipat) and seasonal barriers at Asandh (tahsil Kaithal), Samalkha and Israna (tahsil Panipat) to intercept smuggling of foodgrains to other States.

Karnal is on the top in the State in procurement of wheat and rice as is

evident from the following figures for the years 1966-67 to 1969-70 :—

Year	Wheat		(Metric tonnes)	
	Procured in the State	Procured in the Karnal district	Procured in the State	Procured in the Karnal district
1966-67	8,616	3,480	88,594	65,367
1967-68	49,428	21,179	1,68,424	1,21,554
1968-69	2,03,394	79,284	1,59,549	1,09,709
1969-70	2,70,756	1,41,317	2,34,016	1,55,594

PLANNING DEPARTMENT

The Economic and Statistical Organisation under the administrative control of the Planning Department, Haryana, is represented in the district by the District Statistical Officer. His functions are centred in co-ordinating the statistical activities of the different departments at the district level. He collects, compiles, analyses and maintains statistics relating to various socio-economic aspects of the district, checks and scrutinises the periodical progress reports prepared by the Block Development and Panchayat Officers and by various other District Officers, and prepares District Statistical Abstract and Municipal Year Book. He conducts various socio-economic surveys in the district assigned by the Economic and Statistical Adviser to Government, Haryana. He also renders technical guidance to the reporting agencies in collecting and compiling reliable statistics and to the other departments in conducting surveys and enquiries.

NATIONAL SAVINGS ORGANISATION

The National Savings Organisation came into existence during World War II when it was known as the National Savings Central Bureau. It was re-organised in 1948, when a Regional Director was appointed in each State, assisted by an Assistant Regional Director, and one or two District Organisers, National Savings, in each district.

The Karnal Branch of the National Savings Organisation was established in 1951-52 under a District Organiser, National Savings. In 1963, another Organiser for Small Savings, with jurisdiction over Panipat and Kaithal tahsils,

was posted at Panipat. The main functions of the District Organiser are as under:

- (i) to promote the habit of thrift among the public;
- (ii) to persuade the public to invest their savings with Government in one of the Small Savings Securities;
- (iii) to appoint, guide, train and motivate the agents;
- (iv) to form savings groups and watch the efficient functioning of these groups;
- (v) to work for the promotion of Savings Movement in close relationship with other Government organisations like the Post Offices, Community Projects, Co-operatives, Schools and Colleges, Municipalities and State Governments, and to utilise the good offices of the non-official organisations for the purpose.

A Savings Committee reviews the progress of the Small Savings Scheme every month and devises ways and means for its intensification. The district targets are sub-divided among various trades and professions, educational institutions, industries, bazaars, mandis, offices, etc., and the implementation of these is entrusted to the members of the Savings Committee. In order to educate the people regarding the advantages of the Scheme to them and to the nation, publicity is carried out by means of cinema slides, films, folders, posters, exhibitions, public meetings, door-to-door and shop-to-shop canvassing, etc.

The gross and net¹ collections for the years 1959-60 to 1969-70 in the district were as follows:—

Year 1	Gross collections 2	Net collections 3
	(Rs.)	(Rs.)
1959-60	1,97,63,078	29,68,333
1960-61	2,11,19,218	17,70,112
1961-62	1,89,14,749	3,26,217
1962-63	1,98,92,306	9,98,551
1963-64	1,77,29,568	20,14,173

1. The difference between deposits and withdrawals made during a particular year is reckoned as 'net collections'.

1	2	3
	(Rs.)	(Rs.)
1964-65	2,00,47,441	29,61,113
1965-66	2,34,91,713	30,55,705
1966-67	2,54,71,621	18,15,390
1967-68	3,35,12,728	56,32,403
1968-69	3,72,22,931	51,16,706
1969-70	6,73,17,000	2,47,36,000

Taking 1967-68 as the base year, the Karnal district in 1969-70 has increased its net collections by 450 per cent and has attained first position in the State. This performance has won an award of five lakh rupees from the State Government to be spent on developmental activities in the district.

LANGUAGE DEPARTMENT

In 1957, language teachers were appointed by the Punjab Government to teach Hindi and Panjabi to its employees. In order to ensure an easy and smooth switch-over to Hindi and Panjabi by October 2, 1962, in Hindi and Panjabi regions respectively, Introduction Cells were created in September 1962, at all district headquarters. In the beginning an Instructor represented the Language Department in the district. The office of the District Language Officer, Karnal, was created in 1964.

Efforts to impart training in Hindi were, however, intensified after the formation of the new State of Haryana. The District Language Officer paid visits to various Government offices located in the district, guided and helped the staff in their difficulties. Training in Hindi typewriting and shorthand to the Government employees was also imparted by an Instructor in his office. The duration of type classes was 4 months and that of shorthand classes 9 months. The candidates who had completed these courses successfully by October 31, 1968 were awarded certificates and cash prizes of Rs. 100 and Rs. 150 respectively as an incentive. Hindi was introduced as the official language in the State on January 26, 1969. The objective having been achieved, the training classes in Hindi stenography and typewriting were closed on December 31, 1969 and the office of the District Language Officer was wound up in April 1970.

In order to promote Hindi and Sanskrit, the Department of Languages, during the Second Five-Year Plan (1956—61), introduced two schemes of literary

contests and merit awards. Debating, dramatic and poetical contests are held every year to enrich the Hindi language and two individual prizes of Rs.75 and Rs. 50 are awarded in each category besides a running shield and a cash prize to each of the winning teams in debating and dramatic contests. For popularising Sanskrit, declamation and recitation contests have also been introduced during the Fourth Five-Year Plan (1969—74). Every year two prizes of Rs. 100 (first prize) and Rs. 75 (second prize) are awarded. A total amount of Rs. 975 is distributed as prizes in the contests at the district level in addition to the prizes awarded at State level. A sum of Rs. 500 is spent on giving merit cash awards to the students attaining first position in Hindi or Sanskrit language in the Middle, Matric and Higher Secondary Examinations. To arrange a Kavi Sammelan annually in the district is another activity of the Language Department.

CENTRAL SOIL SALINITY RESEARCH INSTITUTE

This institute was established at Karnal in October 1969. Its extensive aims and objects include collection of detailed information concerning the formation, distribution, extent and characteristics of salt-affected soils in different parts of the country; to conduct research on the methods of reclamation of such soils. They also comprise investigation of the methods and techniques of drainage of such soils and the feasibility of utilizing poor quality waters for irrigation of various crops under different soil and climatic conditions. This institute conducts research in the effect of irrigation under varying conditions of soil, topography and geological formations on water table, salinity development and crop growth with a view to evolving optimum irrigation and water use practices for arid and semi-arid areas. It evolves varieties of crop plants suitable for growing in salt-affected and water-logged areas and investigate the physiological attributes responsible for salt tolerance in plants.

A well-equipped library and basic laboratory facilities are currently housed in a hired building popularly known as Jarnaili Kothi. The institute has a farm of about 40 hectares laid out in 25 metres X 100 metres experimental plots. A large portion of this farm has highly saline-sodic soil (PH 10, ECe 25 mmhos/cm and ESP exceeding 90 per cent of the cation exchange capacity) representative of the major saline-alkali area of alluvial soils in the Indus-Ganga plain. The institute also carries out its programme at Research Sub-Centres at Canning (West Bengal) for costal soils, at Kanpur (Uttar Pradesh) for alluvial soils and at Indore (Madhya Pradesh) for black soils. The Project Co-ordinator for the Co-ordinated Project on Water Management is also stationed at the institute.¹

1. For the achievements of the institute, see Chapter on 'Agriculture and Irrigation'.

FOOD CORPORATION OF INDIA

The district office of the Food Corporation of India was established at Karnal in October 1966. It covers the entire Haryana State and functions under the Regional Office for Punjab and Haryana at Chandigarh. The headquarters of the Corporation are at New Delhi.¹

The functions of the Corporation include purchase, storage, movement, transport, distribution and sale of foodgrains and other food-stuffs. The Corporation assists in setting up of rice mills, flour mills and other undertakings for the processing of foodgrains and other food-stuffs. It acts as a support price organisation to ensure a minimum price for the producer, of which he is assured at all times. At the same time it controls the market against rise in prices. As soon as the prices in the market register higher trend, the Corporation releases its stocks through open auction in the *mandi* to bring down the prices so that the consumer is not required to pay more.

The Food Corporation of India through its Karnal Office procured foodgrains, as shown below, during 1968-69 to 1970-71:

Commodity	Procurement (Quintals)		
	1968-69	1969-70	1970-71
Rice	1,58,000	2,28,000	2,41,000
Paddy		6,000	9,900
Wheat	1,79,000	2,80,000	3,64,000
Bajra	4,000	4,200	20,000
Barley		10,000	6,000
Gram		12,500	32,000
Maize			6,700
Mustard Seed			1,400

1. The Food Corporation of India, with its headquarters at Madras, was established in 1964 as a result of the Act of the Parliament for the purpose of trading in foodgrains and other food-stuffs and dealing with other connected matters. Its headquarters were shifted to New Delhi in 1967. The general administration and management of the affairs and business of the Corporation rests with a Board of Directors. The Board of Directors acts on business principles having regard to the interest of the producer and consumer and is guided by such instructions and questions of policy as may be decided upon by the Union Government.

DEPARTMENT OF TOWN AND COUNTRY PLANNING, URBAN ESTATES AND COLONIZATION

The Divisional Town and Country Planning Unit for the Karnal district started functioning at Karnal in June 1972. Prior to this, the town planning work of the district was handled by the Divisional Town Planner at Ambala. The Divisional Town Planner-cum-Estate Officer, Karnal, is now in charge of the town and country planning work and urban estates in the district. Colonization work is managed directly from the headquarters at Chandigarh. All these three branches function under the overall charge of one officer with three separate designations, viz Director, Town and Country Planning; Director, Urban Estates; and Director, Colonization-cum-Special Land Acquisition Officer, Haryana, Chandigarh.

The Department of Town and Country Planning is concerned with the planned and orderly development of the district. It renders technical assistance in the works relating to Municipal Committees, Improvement Trusts, Colonization, Rural Development, schemes pertaining to the Government departments and in the preparation of master plans. There are two Improvement Trusts in the district, one at Karnal and the other at Panipat. Interim master plans for Karnal and Panipat towns were prepared by this department in 1973-74. In addition, land for setting up an urban estate at Karnal was acquired between the Model Town and the by-pass and, on the basis of finalized lay-out, plots sold/allotted to the public.

This department also prepares schemes on behalf of the Rural Development Board (constituted in February 1971) for development and provision of public amenities in villages. Accordingly, Arjanheri village is being developed as a model village in the district.

The Department of Colonization was established for providing modern marketing facilities in the areas irrigated by canals. In the Karnal district, the Department has established a new mandi-township at Indri and steps are being taken to establish new mandis at Asandh, Tirawari (Taraori), Amin, Samalkha and Kunjpura. Master plans and detailed lay-out plans have been prepared by the Town and Country Planning Department.

The Urban Estate Department looks after the requirements of the people for residential plots in urban areas. Under the Haryana Restriction on Colonies (Development and Regulations) Act, 1971, the Government has placed restrictions on the haphazard sale of plots by private colonizers. A residential urban estate, as already stated, is being developed at Karnal for

which 762 acres of land has been acquired. In the first phase, an area of about 339 acres has been planned and is being developed on modern lines. Civic amenities like wide roads, open spaces, parks, community buildings, water-supply, sewerage, electricity and drainage, would be provided. The remaining land will be developed in the second phase. The area would be completely free from flooding since a system of drainage has been provided for the discharge of rain water. Plots of different sizes, viz. one kanal (420 square metres), 14 marlas (300 square metres), 10 marlas (210 square metres) and 6 marlas (138 square metres) have been offered for sale on freehold basis. The price varies from Rs. 39.50 to Rs. 44.30 per square metre. It is also proposed to develop residential and industrial urban estates at Panipat for which 869 acres of land is being acquired.



RURAL ELECTRIFICATION

The Haryana State Electricity Board started functioning on May 2, 1967. Till then, only 1,251 villages out of a total of 6,669 had been electrified in the State. There were 18,663 kilometres of transmission and distribution lines and the number of sub-stations was 5,437. The number of power-run tubewells was 20,568. The State was deficit in foodgrains and industrially and technologically, too, it was backward, inasmuch as the benefit of power was unknown in most parts of the State. Haryana was not consuming its full share of power from the Bhakra Complex and the Delhi Thermal Plant. After the formation of Haryana, and particularly after Shri Bansi Lal had taken over as Chief Minister in May 1968 the electrification of villages and energisation of tubewells was accelerated. By March 1969, the number of electrified villages rose to 1,464 and of energised tubewells to 45,370 as from 1,262 and 29,000 respectively in May 1968. In 1969-70, 1,903 villages were electrified and 22,856 power-driven tubewells were installed and finally on November 14, 1970, the rural electrification programme in the State was completed. The Prime Minister of India, Shrimati Indira Gandhi, formally switched on a symbolic light in the last village Uchani (a hamlet of Uchana) near Karnal on November 29, 1970. By July 1973, the number of tubewell connections rose to 1,18,763. These tubewells irrigated about 4.6 lakh hectares of cultivated land which was nearly 50 per cent of the area irrigated by the canals. The length of transmission and distribution lines increased to about 75,000 kilometres and the number of sub-stations was more than

20,000. About 11,500 industrial and 2,15,000 general connections had been added during the period April 1968 to July 1973. The number of electric consumers was more than 6.78 lakhs by the end of July 1973 as compared to 3.57 lakhs in May 1968. The daily consumption had increased from 2.03 million units in March 1968 and touched 6.2 million units in March 1973.

In the Karnal district, 289 villages out of a total of 1,357 villages had been provided with electricity till the 31st March, 1968 and there were 9,823 power-run tubewells by that date. During 1969-70, the number of electrified villages rose to 686 and of power-run tubewells to 24,550. By June 1971, this district had 32,580 tubewells out of a total of 89,021 tubewells in the State and had thus topped among all districts in minor irrigation facilities. Electricity is now used for threshing crops, grinding wheat, shelling rice, cutting fodder, ginning cotton and for other agricultural activities. Artisans like blacksmiths and mechanics have started using power-run wheels and furnaces in their workshops and small industrial units are coming up in rural areas.



Chapter XIV

LOCAL GOVERNMENT

HISTORICAL BACKGROUND

The history of development of local government institutions in the district covers a period of one hundred years. The first step towards the introduction of local Government in the district was taken in 1867 by constituting municipalities at Karnal, Panipat, Kaithal, Thanesar, Shahabad (Shahbad), Ladwa, Pundri, Pehowa and Kunjpura. In 1885, Thanesar and Shahabad (Shahbad), and in 1886, Karnal, Panipat and Kaithal were re-constituted as class II municipalities. Pundri, Pehowa and Kunjpura municipalities were abolished between 1885 and 1887. In 1908, Ladwa municipality was converted into a Notified Area Committee. A notified area committee was also constituted for Kaithal Mandi the same year. In 1924, it was raised to a small town committee and Pundri and Radaur were also declared as small town committees.

In 1949, Karnal Municipal Committee was raised to the status of class I. In 1953, the Notified Area Committee of the Civil Lines of Karnal, was merged into it, and a class III municipal committee was created at Gharaunda. The Punjab Small Town Committees Act, 1921, was repealed by the Punjab Municipal (Second Amendment) Act, 1954, and it converted all small town committees into class III municipal committees. Accordingly, the small town committees at Ladwa, Radaur, and Pundri were converted into class III municipal committees in 1955. The Notified Area Committee, Kaithal Mandi (created in 1908) was merged into Kaithal Municipal Committee in 1955. In 1954, a notified area committee was established at Nilu Kheri (Nilo Kheri). In 1959, the Panipat New Township was merged into Panipat Municipal Committee and a class III municipal committee was constituted at Pehowa.

In 1970, the district had 11 municipal bodies: Municipal Committee, Karnal was class I; Municipal Committees, Panipat, Kaithal, Thanesar and Shahabad (Shahbad) were class II; Municipal Committees, Ladwa, Radaur, Pundri, Pehowa and Gharaunda were class III and Nilu Kheri (Nilo Kheri) was a Notified Area Committee.¹

1. Since January 1973, the Municipal Committees of Kaithal, Thanesar, Shahabad (Shahbad), Ladwa, Radaur, Pundri and Pehowa have fallen in the Kurukshetra district.

Each municipal committee is divided into wards. The members of the committees are elected on the basis of adult franchise. Some seats are, however, reserved for Scheduled Castes.

The main duties of the committees are to supply water for drinking and other purposes; maintain streets, roads, drains and sewerage; control dangerous or offensive trades; construct buildings and design lay-out of streets; make arrangements for fire-fighting and to look after public health and scavenging of the town. They also provide street lights, playgrounds, public parks, medical aid, public libraries, etc.

Octroi is the main source of income, the other sources of income include house tax, *tehbazari*, licence fee, building tax, rent of municipal property, sale of compost, etc.

KARNAL MUNICIPAL COMMITTEE

Karnal town was constituted into a class II municipal committee in 1886. In view of its growing importance, it was raised to the status of class I in 1949. There was a separate notified area committee for the Civil Lines but in 1953, it was merged into Karnal Municipal Committee. The area of the town is 3.80 square miles. It is divided into 23 wards. The committee had 18 members but has been superseded since July 1968.

Water-supply.—Formerly, the sources of water-supply in the town were shallow percolation wells and hand pumps. In 1952-53, piped water-supply was made available to the old town partially which was later extended to the Railway Road area. The extension of water-supply in the Civil Lines and other parts of the old town is in progress. The Model Town has an independent water-supply system. This scheme was executed in 1949.

Drainage.—The town is provided with surface drainage. The construction of underground drainage has been in progress since 1965-66. In a part of the Model Town, underground drainage was provided in 1954.

Streets and street lighting.—The streets are well paved. Electric lights have been provided almost in all parts of the town and the old oil lamps have become a thing of the past. In 1967, there were 1,240 light points including 24 mercury lamps provided at prominent places. The number, in 1970, rose to 1,310 electric points which included 625 fluorescent tubes.

Parks.—Karan Park spreading over an area of 8 acres has been laid out by the municipal committee. A portion of the park equipped with different

kinds of play material has been ear-marked for children. A few small parks have also been laid out in the Model Town and the Mud Hut Colony.

Conservancy.—The conservancy and public health are under the supervision of a Municipal Medical Officer, who is assisted by sanitary staff. Three tractors with trolleys and 10 carts are maintained for the removal of rubbish and nightsoil from the town. On the basis of their customary right to the disposal of the refuse, the sweepers deposit it in heaps at places just outside the municipal limits and eventually sell it to the farmers without converting it into compost manure.

Education.—Prior to the provincialisation of schools in 1957, the committee maintained nine primary schools for boys and one middle and four primary schools for girls.

Fire brigade.—The committee purchased fire fighting unit consisting of a jeep, fire engine with trailer and other equipment in 1961. The services of this fire brigade are available to the whole of the district.

Library and reading rooms.—The municipal committee runs two library-cum-reading rooms; Gandhi Municipal Library-cum-Reading Room and Ram Nagar Municipal Library-cum-Reading Room.

The income and expenditure of the municipal committee during 1964-65 to 1969-70 are given in Table XXXVIII of Appendix.

PANIPAT MUNICIPAL COMMITTEE

The Municipal Committee, Panipat, was first constituted in 1867. It was re-constituted in 1886 as a class II municipal committee. It covers an area of 3 square miles and is divided into 23 wards. It has 23 members (1970).

The streets are well-paved and most of them are provided with side drains. In 1967, the underground drainage was in progress. The town is provided with 1,252 electric light points including 206 fluorescent tubes. The piped water-supply is available in the town and there are 3,600 connections besides 375 public stand posts. The committee maintains ten parks and one library-cum-reading room. In 1966-67, a fire fighting jeep was purchased by the committee.

The income and expenditure of the municipal committee during 1964-65 to 1969-70 are given in Table XXXVIII of Appendix.

KAITHAL MUNICIPAL COMMITTEE

It was first established in 1867, but was reconstituted in 1886 as a class II municipal committee. The Notified Area Committee, Kaithal Mandi constituted in 1908 was merged into it in 1955. Its area is about 3 square miles and is divided into 16 wards. In 1969, it had 17 members. The committee was, however, superseded in April 1969 and put under the control of an Administrator.

The piped water-supply to the town was started in 1959-60 and in 1970, there were 1,458 private connections besides 120 public stand posts. The streets, provided with surface drains, are well-paved and well lighted with 614 electric light points. The conservancy and public health work is looked after by a Sanitary Inspector and Sanitary Jamadars under the overall charge of the Administrator. The committee maintains two municipal parks, one library-cum-reading room and two tractors and trolleys for the removal of refuse from the town.

The income and expenditure of the municipal committee during 1964-65 to 1969-70 are given in Table XXXVIII of Appendix.

THANESAR MUNICIPAL COMMITTEE

Local government in the town was initially introduced in 1867. In 1885, it was re-constituted into a class II municipal committee. It covers an area of 6 square miles and is divided into 12 wards. It had 13 members, but the committee was superseded in February 1968 and put under the control of an Administrator.

The town is provided with piped water-supply; 723 private connections besides 101 public stand posts. The 338 electric light points do not cover all the streets; so 52 points have been provided for kerosene oil lamps in various parts of the town which are therefore not as well lighted. The municipal committee maintains a municipal park and a library-cum-reading room.

The income and expenditure of the municipal committee during 1964-65 to 1969-70 are given in Table XXXVIII of Appendix.

SHAHABAD (SHAHBAD) MUNICIPAL COMMITTEE

In 1867, a municipal committee was set up at Shahabad (Shahbad) which was re-constituted as a class II municipal committee in 1885. It covers an area of 0.68 square mile and is divided into 12 wards. In 1970, it had 13 members.

The piped water-supply in the town was commissioned in 1961. In 1970, there were 1,102 private connections besides 110 public stand posts. There is proper arrangement for street lighting for which 380 electric light points have been provided. The committee maintains a library and reading room.

The income and expenditure of the municipal committee during 1964-65 to 1969-70 are given in Table XXXVIII of Appendix.

PEHOWA MUNICIPAL COMMITTEE

Local government was first introduced in Pehowa in 1867, but was abolished between 1885-87. It was constituted as a class III municipal committee in 1959. It serves an area of 0.52 square mile and is divided into 10 wards. It had 11 members in 1970.

The committee maintains a reading room. A tractor has been purchased for the removal of refuse from the town. The committee has provided 150 electric street light points and 50 fluorescent tubes at various places.

The income and expenditure of the municipal committee during 1964-65 to 1969-70 are given in Table XXXVIII of Appendix.

LADWA MUNICIPAL COMMITTEE

Ladwa was first constituted as a municipal committee in 1867 but, in 1908, it was reconstituted as notified area committee. It was converted into a small town committee in 1924 and was raised to class III municipal committee in 1955. It covers an area of 0.25 square mile and is divided into 10 wards. It had 11 members in 1970.

The municipal committee maintains a public park and a well equipped library and reading room. The streets are paved and lighted. In 1970, there were 178 electric light points including 27 four-foot and 12 two-foot fluorescent tubes. The committee maintains a tractor and two trailers for removal of refuse from the town.

The income and expenditure of the municipal committee during 1964-65 to 1969-70 are given in Table XXXVIII of Appendix.

RADAUR MUNICIPAL COMMITTEE

Radaur was first declared as a small town committee in 1924. It was raised to class III municipal committee in 1955. It covers an area of 1.00 square mile and is divided into 10 wards. In 1970, it had 11 members.

There is proper arrangement for street lighting and 25 fluorescent tubes and 36 electric points have been installed at various places. The pavement has been done in a number of streets. The committee also maintains a library and a reading room.

The income and expenditure of the municipal committee during 1964-65 to 1969-70 are given in Table XXXVIII of Appendix.

PUNDRI MUNICIPAL COMMITTEE

It was first constituted in 1867 but was abolished between 1885 and 1887. In 1924, it was declared as a small town committee and was converted into a class III municipal committee in 1955. It covers an area of 1.5 square miles and is divided into 9 wards. In 1970, there were 11 members elected to the municipal committee.

The income and expenditure of the municipal committee during 1964-65 to 1969-70 are given in Table XXXVIII of Appendix.

GHARAUNDA MUNICIPAL COMMITTEE

This committee was constituted as a class III municipal committee in 1953 and its first election was held in 1959. It covers an area of 0.60 square mile and is divided into 11 wards. It has 13 members.

The income and expenditure of the municipal committee during 1964-65 to 1969-70 are given in Table XXXVIII of Appendix.

NILU KHERI (NILO KHERI) NOTIFIED AREA COMMITTEE

A notified area committee was established at Nilu Kheri in 1954 and sanitation, street lighting and arboriculture of the town were entrusted to it. In 1961, the remaining municipal functions were also transferred to the notified area committee. The committee covers an area of 1.81 square miles.

The township of Nilu Kheri (Nilo Kheri) has all the modern amenities like water works, drainage, street lighting and public parks. The committee has also set up a small reading room.

The income and expenditure of the committee during 1964-65 to 1969-70 are given in Table XXXVIII of Appendix.

TOWN PLANNING

Town planning is the responsibility of the local authorities. They prepare schemes relating to the area falling within the municipal limits. These schemes

envisage demarcation of the area into building or residential plots of varying sizes as well as areas for roads and open spaces.¹

There are two Improvement Trusts at Karnal and Panipat. These Improvement Trusts have taken up a number of schemes for the acquisition of land and its development by laying out plans for the construction of roads, water-supply, sewerage, disposal works, etc.

The Government also laid out and constructed model townships in 1948-49 at Karnal, Panipat and Nilu Kheri (Nilo Kheri) through the Public Works Department.

PANCHAYATI RAJ

In the past, the proprietary body possessing rights of ownership in the common land of the village formed the nucleus round which the subsidiary parts of the community were grouped. The proprietary body was seldom wholly confined to one single family, strangers having almost always obtained admission in one way or another. Very often the community consisted of two distinct tribes or the sections of the same tribe holding more or less equal share in the village. The community, however constituted, was sub-divided into *pannas* (wards), each *panna* embracing a branch of the family descended from some common ancestor, with some strangers settled by that branch who were not sufficiently numerous to constitute a separate *panna* by themselves. The *pannas* were very commonly again sub-divided into *thulas* which were also based upon community of descent.

The village was represented by one or more headmen for each *panna* or *thula* according to size; and these again were assisted by *thuladars*, a kind of assistant headmen who were not officially recognised. The headman had a considerable discretion in the choice of his *thuladars* but the latter were chosen carefully to represent the various genealogical branches of the community. The headmen and the *thuladars* together with such men as had gained influence by age or ability constituted the *panch* or village council. Such councils sometimes known as *thapas*, exercised considerable authority and successfully settled a large number of disputes. The distribution of the revenue was also wholly in the hands of the *thapas* and village councils. The

1. There is a Divisional Town Planner at Ambala under the Haryana Town Planning Organisation. His function is to assist the local bodies and the Government in town planning. The Karnal district falls within his jurisdiction.

institution represented not only the collective will but also the collective wisdom of the entire rural community. These looked to all the needs of the village and administered justice irrespective of caste, creed and faith.¹

These traditional village councils of old continued during the Muslim period and also in the Sikh period. The Muslim rulers being indifferent to this matter, the village communities were left to manage their own affairs undisturbed except for the payment of land revenue to the ruling power. The *Qazi* and the *Kotwal* were no doubt invested with some powers which had previously been exercised by the *panchayats* but no direct steps were taken to abolish the *panchayats*.

The village *panchayats* were, however, partially revived in the Sikh regime for helping the government in administration, collection of taxes and maintenance of law and order. The ancient traditions of village *panchayats* began to crumble during early British rule. British influence, dominant and all embracing, almost killed all village institutions and the foremost amongst them was the village *panchayat*. An average villager realised that under the regime of village officials, the *panchayat* was completely ignored. In the circumstances the headman, hitherto not so prominent, acquired considerable power and prestige.

As the *panchayats* became ineffective in community life, it was realised that for the routine administration of common affairs of the village some kind of organisation was necessary. The Decentralisation Commission of 1908 concluded that it was desirable that an attempt be made to constitute village *panchayats* for the administration of local affairs. The attempt made in 1912 to revive the *panchayat* system failed to inspire any confidence or respect in the people because only those persons could find a place in the *panchayats* who had ingratiated themselves with the authorities. The Village Panchayat Act, 1922, abolished the *panchayats* created by the Act of 1912 and provided for the re-constitution of *panchayats* consisting of elected Panches who would hold office for 3 years. The *panchayats* were given administrative functions and judicial powers both criminal and civil although to a nominal extent. The Panchayat Act of 1939 consolidated and extended the law relating to *panchayats* and gave them wider judicial powers and powers of taxation.

The necessity to establish village *panchayats* throughout the country was fully recognised after the Independence and this was laid down in the

1. *Karnal District Gazetteer*, 1883-84, pp. 114-15.

Constitution as one of the Directive Principles of State Policy. In pursuance of this, the Gram Panchayat Act of 1952 (Punjab Act IV of 1953) was passed. In all, 968 *panchayats* were elected covering entire rural population of the district. The final step toward the implementation of the Panchayati Raj was the enactment of the Punjab Panchayat Samitis and Zila Parishads Act, 1961. Under the Act, the Panchayat Samitis and Zila Parishad were constituted at the blocks and district level respectively. In this way, the Panchayati Raj became a three-storeyed edifice having *panchayat* as its basic unit at village level, Panchayat Samiti at the block level and Zila Parishad at the district level.¹

(i) PANCHAYATS

The total membership of 968 *panchayats*² was 6,366 which included 1,233 Harijan Panches and Sarpanches and 890 women Panches and Sarpanches.

Every person, male or female, who is entered as a voter on the electoral roll of the State Legislative Assembly is a member of the *gram sabha* and it is these members who elect the Sarpanch and Panches from amongst themselves. The number of Panches per *panchayat* shall not be less than 5 or more than 9, the exact number depending on the population of the *sabha* area.

Democratic considerations necessitated that no section of the community should remain unrepresented on the *panchayat*. If no woman is elected as a Panch of any *sabha*, the woman candidate securing the highest number of votes amongst the women candidates in that election is to be co-opted by the *panchayat* as a Panch of that *sabha* and where no such woman candidate is available, the *panchayat* is required to co-opt as a Panch a woman member of the *sabha* who is qualified to be elected as a Panch.

Every *panchayat* has to have one Panch belonging to the Scheduled Castes if their population is five per cent or more of the total population of the *sabha* area, provided that every *panchayat* with seven or more Panches has to have two Panches who are members of the Scheduled Castes if the population of the Scheduled Castes is 10 per cent or more of the total population of *sabha* area. If the required number of Scheduled Castes are not elected as Panches, the Scheduled Castes candidate or candidates, as the

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1. The institution of Zila Parishad has been abolished since June 13, 1973.
 2. After the reorganisation of the Karnal district in January 1973, the number of *panchayats* has decreased to 467.

case may be, securing the highest number of votes from amongst themselves is or are deemed to have been elected as the last Panch or the last two Panches. In case the requisite number of Scheduled Castes are not elected in the aforesaid manner, then the *panchayat* itself is required to make up the deficiency by nominating a duly qualified person or persons of such castes. Should, for any reason, the requisite number of Scheduled Castes be not elected or co-opted in the above manner, Government has the authority to make good the deficiency by nomination.

Income.—The *panchayats* are authorised to levy taxes, duties and fees. Apart from miscellaneous items, the main sources of income are : grants from government, house tax, income from *shamlat* land, voluntary contributions, ten per cent of the land revenue of the *panchayat* area, fees and fines.

Judicial functions.—*Panchayats* have been given powers to try certain minor offences like petty thefts, affray, public nuisance, etc., and are also empowered to impose fines. They are not bound by the provisions of the Indian Evidence Act, 1872, and as such, lawyers are not permitted to appear in the proceedings before a *panchayat*. The *panchayats* have also been given powers for trying civil and revenue judicial cases within certain pecuniary limits. In respect of these cases, they are under the control of the District Judge and the Collector respectively.

The Chief Judicial Magistrate hears appeals from their orders in criminal cases, and is empowered to transfer cases from one *panchayat* to another.

The judicial (criminal and civil and revenue) work done by the *panchayats* during 1956-57 to 1968-69 is shown in Table XXXIX of Appendix.

Public utility work.—The functions of the *panchayats* cover all important matters relating to municipal and development works in villages and also encouragement of industries and agriculture for improving the economic condition of the community. The public utility work done by the *panchayats* during 1956-57 to 1968-69 is given in Table XL of Appendix.

(ii) PANCHAYAT SAMITIS

The entire district has been divided into 15 blocks¹, each with a

1. With the reorganisation of the Karnal district on January 23, 1973, the number of blocks has decreased to 8, viz. Karnal, Gharaunda, Nisang, Nilu Kheri (Nilo Kheri), Panipat, Samalkha, Madlauda and Asandh.

Panchayat Samiti which consists of 19 primary members ; 16 members elected by Panches and Sarpanches, 2 members elected by co-operative societies, and 1 member elected by market committees. Every M.L.A. representing the constituency of which the block forms a part, works on the Panchayat Samiti as an associate member. Two women members and four members belonging to the Scheduled Castes, if not elected otherwise are co-opted to the Panchayat Samiti. The Sub-Divisional Officer (Civil) and Block Development and Panchayat Officer work as *ex-officio* members. The *ex-officio* and associate members do not have the right to vote.

The Chairman and Vice-Chairman of the Panchayat Samiti are elected by the primary and co-opted members from amongst themselves for a term of 3 years. The Block Development and Panchayat Officer is the Executive Officer of the Panchayat Samiti.

The details about the Blocks, *panchayats* and their Panches are given in Table XLI of Appendix.

Panchayat Samiti is the most important structure in Panchayati Raj. Most of the work relating to the development of villages in the fields of agriculture, animal husbandry and fisheries, health and rural sanitation, communications, social education, co-operation and a number of other miscellaneous subjects is entrusted to it. It is an agency of the Government for the formulation and execution of the community development programme and disbursement of loans.

The Panchayat Samiti has a vital role to play in building up a sound financial structure for Panchayati Raj. The Samiti fund consists of : (1) the apportionment made to it by the Government out of the balance of the district fund standing to the credit of the District Board concerned, (2) local rate allotted to Panchayat Samiti, (3) proceeds of all taxes, cesses and fees, (4) funds allotted to Panchayat Samiti and income arising from all sources placed at its disposal, (5) rents and profits accruing from property vested in it or managed by the Panchayat Samiti, (6) all sums contributed to the fund by the Central Government or State Government or any local authority including the *gram panchayat* or any private persons, (7) all sums received by the Panchayat Samiti in the discharge of functions exercised by it, (8) all sums paid by Government to Panchayat Samiti to meet expenses for the performance of agency functions, (9) grants made by Government for the implementation of community development programme and (10) proceeds of all sources of income which the Government may place at the

disposal of Panchayat Samiti. In addition, the Panchayat Samiti with the permission of the Zila Parishad could impose any tax which the State legislature has power to impose.¹

ZILA PARISHAD

The rural area of the district prior to June 13, 1973, was under the administration of the Zila Parishad, which replaced the District Board in February 1964. The idea of the District Board can be perceived in the Local Rate Act, 1871, wherein the Lt. Governor was empowered to appoint committees in each district to assist him in determining the manner in which the local rate in rural areas was to be applied. Accordingly, the first committee in the district was formed in February 1872. It consisted of 10 non-official members who were appointed on the recommendation of the Deputy Commissioner. In 1883, however, by virtue of the Punjab District Boards Act, 1883, the principle of election was made applicable to the district committee which was then termed as District Board. It consisted of 32 elected, 6 appointed and 10 ex-officio members. The Deputy Commissioner was the ex-officio Chairman. Simultaneously, 4 local boards, one in each tahsil, were also established. The Sub-Divisional Officer acted as President of local board at Kaithal whereas in other tahsils, the Tahsildars acted as Presidents. The district was divided into 32 electoral circles usually composed of one or two *zails*. Every male person of not less than 21 years of age who paid Rs. 2-1-4 or upwards as local rate, or was a Lambardar was qualified to vote for the election in his *zail* or circle. The local boards did not prove of much utility and hence were abolished in 1902.

The Deputy Commissioner continued to be the chairman of the District Board up to 1949. The first (and the last) non-official chairman of the District Board, Karnal, was elected during 1949 and continued up to June 1954, when the Board was suspended. It was re-constituted on the promulgation of the Governor's Ordinance, 1954 and was subsequently replaced by the Punjab District Board (Temporary Constitution) Act, 1954 whereby all the members of the Board except official members vacated their seats and the administration of the Board passed on to the Deputy Commissioner in his official capacity as chairman.

With the enactment of the Punjab Panchayat Samitis and Zila Parishads Act, 1961, the District Board was replaced by the newly constituted

1. Since the abolition of the Zila Parishad on June 13, 1973, its powers have been vested in the Deputy Commissioner.

Zila Parishad in February 1964.

The Zila Parishad consisted of : two members elected by each Panchayat Samiti ; the Chairman of every Panchayat Samiti ; the Deputy Commissioner ; every M.P. and M.L.A. from the district and co-opted members. The Zila Parishad had at least two women members and five members belonging to the Scheduled Castes. The Zila Parishad elected its Chairman and Vice-Chairman. The Secretary was appointed by the Government.

Duties.—The Zila Parishad advised, supervised and co-ordinated the plans prepared by the Panchayat Samitis, examined and approved their budget and advised the Government about *panchayats* and Panchayat Samitis and kept a watch over the agricultural production and construction works.

Income.—The income of the Zila Parishad accrued from the funds allotted to it by the Central Government or the State Government, grants from all-India bodies and institutions for the development of cottage, village and small-scale industries, local rate, income of endowments and contributions levied on Panchayat Samitis.

The income and expenditure of the Zila Parishad, Karnal during 1964-65 to 1969-70 are given below :

Year	Income (Rs.)	Expenditure (Rs.)
1964-65	17,32,292	10,37,180
1965-66	6,99,720	7,89,850
1966-67	6,65,387	6,53,226
1967-68	12,98,579	12,76,309
1968-69	16,35,798	11,34,794
1969-70	18,33,697	13,87,827

The Zila Parishads in the State were abolished on June 13, 1973 under the provisions of the Punjab Panchayat Samitis and Zila Parishads (Haryana Amendment) Act, 1973, and their duties and functions have been entrusted to the respective Deputy Commissioners.



सत्यमेव जयते

Chapter XV

EDUCATION AND CULTURE

HISTORICAL BACKGROUND

The district was “the centre from which Indo-Aryan culture spread, first throughout the Hindustan, and eventually throughout the whole sub-continent.” A major part of the later Vedic literature, including the *Brahmanas*, the *Aranyakas*, the *Upanishads* and the *Canonical Sutras*, was composed on the banks of the sacred river Sarasvati where the *rishis* lived with their numerous disciples. The *ashrams* of these *rishis* were the most important centres of study of subjects which formed the bed-rock of ancient Indian culture, namely religion, philosophy and ethics. Later, the great sage Vyasa composed the *Mahabharata*, and the renowned law-giver Manu is also said to have compiled his epoch-making code, the *Manu Samriti*, in this very region.

This area continued to be for centuries the centre of religious learning which took precedence over secular knowledge. With the expansion of Aryan influence over the Ganga plain, Mathura and Varanasi came to occupy the place of honour. The spread of Buddhism eventually produced opportunities for a socio-religious get-together of Buddhistic with the Brahmanical culture, which gave birth to Hinduism. Thanesar played an important part in generating and practising that cultural amalgam which is considered to be the essence of Hindu culture.

Harsha of Thanesar and Kanauj was a distinguished patron of this new learning which was typified by the courses taught at the most important university of his time at Nalanda. In addition to Mahayana Buddhism, Brahmana philosophy, Vedic literature and grammar and even the agnostic Sankhya system were taught at this centre of learning. Mathematics and medicine were the only subjects which could possibly be considered as secular. Himself reputed as a poet and author of three Sanskrit dramas, Harsha made liberal grants to Nalanda and created rich endowments ‘in favour of monasteries and seats of higher learning around Sthanvishvar (Thanesar)’ as well as in the rest of his kingdom. He took a leading share in forging the new cultural matrix.

1. *The Cambridge History of India, Volume I, Ancient India, 1955, p. 42,*

With the onset of foreign invasions the Hindu cultural and educational pattern described above was thrown everywhere into disarray and it was not until the Muslim Sultanate was established at Delhi that this region once more participated in forging a still newer cultural matrix. It became the home of *Sufi* saints, divines, scholars, theologians and stipendaries who helped to some extent in synthesising the best in Muslim and Hindu thought. They also became responsible for advanced learning. Schooling as such was almost entirely in the hands of Muslims who, besides teaching the *Quran* in the mosques, gave instruction in the Persian classics, as also in the writing of letters and documents. Gurukuls of the old type in which Brahman boys learnt Sanskrit and received a predominantly religious training were few and far between. In addition, there was a large number of secular schools (Mahajani) where sons of Hindu shopkeepers were taught to keep accounts and read and write the trader's script (*lande*). One significant feature of these indigenous schools was that they were not confined to any particular class, but were open to anyone who cared to attend. Like other districts of the Punjab, Karnal had also a number of such indigenous schools. The Arabic School at Panipat was also quite well known.

After the Annexation of the Punjab in 1849, the modern system of secular education made its appearance. Slow to begin with it gathered tremendous force as time passed. This secular system, covers such an increasing number of secular subjects including science with its manifold branches that in the end the ability to earn livelihood has become the principal object of education for an individual. The development of educational institutions in the Karnal district as elsewhere must be viewed in this light. The Government founded schools in the cities and larger towns while the district officers founded and maintained schools at minor places out of local funds. In 1888-89 there were 5 (3 English and 2 Vernacular) middle schools, 63 (3 English and 60 Vernacular) primary schools in the district. Besides, the Delhi Zenana Mission at Karnal ran two schools.

Educational institutions increased in number in the district but the general public by and large remained apathetic towards them. In 1900-01, there were 1 high school, 9 middle schools and 87 primary schools, but by 1930, the number rose to 9 high schools, 116 middle schools and 309 primary schools. The pace of education was steady after 1930 and there were 15 high schools, 104 middle schools and 341 primary schools in 1948-49.

The Independence ushered in a new era, which stirred the Government and the people alike. It was realised that education alone could

enable the population to meet the demands of the new social order. As would appear from the data given below, expansion in education occurred rapidly with the result that in 1969-70, the district had 27 higher secondary schools, 126 high schools, 124 middle schools and 821 primary schools including basic schools, and 1 pre-primary school :

Year	Number of schools				Number of scholars		
	Higher Sec- ondary	High	Middle	Primary and junior basic	Total	Boys	Girls
1948-49	—	15	104	341	..	..	..
1960-61	6	73	99	861	1,23,428	92,955	30,473
1965-66	29	70	123	928 ¹	1,88,064	1,34,787	53,277
1966-67	29	75	123	859	2,01,911	1,45,947	55,964
1967-68	29	97	118	842	2,14,386	1,55,577	58,809
1968-69	28	111	123	825	2,31,060	1,66,325	64,735
1969-70	27	126	124	821	2,39,851	1,72,659	67,192

More details about the progress in the field of education at the school level in the urban and rural areas of different tahsils of the district are given in Table XLII of Appendix.

EDUCATION OF WOMEN

The education of women had been totally neglected. In 1880, there was no school for girls, and of the individual effort, if any, no trace has been left except that of a Brahman Pathshala at Karnal which had been established about 1860. The education of girls moved very slowly. In 1911-12, there was only one primary school for girls. In the post-Independence period, a veritable revolution in the field of women's education was witnessed when voluntary organisations like the Singh Sabha, Sanatan Dharam Sabha, Arya Samaj and others also opened a number of schools for girls. By 1970, the district was well advanced in the field of women's education and there were 5 higher secondary schools, 19 high schools and 16 middle schools for girls. The consistent efforts made toward the spread

1. This figure is inflated because it includes branch primary schools.

of female education may be gauged from the data given below :

Year	Girl schools			
	Primary	Middle	High	Higher Secondary
1951-52	..	..	..	..
1955-56	81	10	..	..
1960-61	188	17	16	2
1965-66	—	18	14	5
1968-69	—	18	17	5
1969-70	—	16	19	5

It is a healthy sign of the times that at places where no institutions for girls were started, people were ready to send their girls to the institutes for boys. All the primary schools have been made co-educational. The middle, high and higher secondary schools at places having no separate schools for girls have also been made co-educational.

The number of girl students which was 17,057 in 1955-56, rose to 30,473 in 1960-61, 53,277 in 1965-66 and 67,192 in 1969-70. The district ranked third in the State in respect of female education, the first two being Ambala and Rohtak districts respectively.

The Karnal tahsil led in female literacy. The following table shows tahsil-wise percentage of literate females in 1961 and 1971 :—

Tahsil	Percentage of literate females	
	1961	1971
Karnal	12.93	30.08
Panipat	11.32	27.98
Thanesar	10.02	23.86
Kaithal	7.25	19.12

EDUCATIONAL SET-UP

Prior to the re-organisation of the educational set-up in 1963, the high and higher secondary schools were controlled by the Divisional Inspector and Divisional Inspectress of Schools located at Ambala. The boys and girls schools up to middle standard were controlled by the District Inspector/District Inspectress of Schools and the primary schools by the Assistant District Inspector/Inspectress.

Consequent upon the re-organisation of the educational set-up on May 8, 1963, the District Education Officer, Karnal, has been made responsible for the administration of all primary, middle, high and higher secondary schools. He is directly under the administrative control of the Director, Public Instruction, Haryana, Chandigarh. He is assisted by 3 Deputy Education Officers.¹ If the District Education Officer is a man, one of the Deputy Education Officers has to be a woman who will be generally consulted in matters relating to the women teachers' establishment.

The District Education Officer is further assisted by 20 Block Education Officers whose areas of operation are normally co-terminus with the development block². There may, however, be more than one Block Education Officer in a block depending upon the number of primary schools. This explains why there are two Block Education Officers each in Karnal, Panipat, Thanesar, Shahabad (Shahbad), Ladwa and Nilu Kheri (Nilo Kheri) blocks and one each in the other blocks except Rajaund. Besides, an Assistant Education Officer for Physical Education advises the District Education Officer in matters relating to National Fitness Corps and looks after the execution of the programme in primary and middle schools.

EDUCATION (GENERAL)

The district board (now Zila Parishad) and municipal committees also contributed to the spread of education and did pioneer work in the field of elementary education. The number of primary, middle and high schools maintained by the local bodies prior to the provincialisation of schools on October 1, 1957, is given below :

Name of the Local Body	Primary Schools		Middle Schools		High Schools	
	Boys	Girls	Boys	Girls	Boys	Girls
1	2	3	4	5	6	7
District Board, Karnal	660	49	76	13	18	2
Municipal Committee, Ladwa	—	—	—	1	—	—
Municipal Committee, Thanesar	2	1	—	1	—	—
Municipal Committee, Shahabad (Shahbad)	3	4	—	—	—	—

1. According to the subsequent re-organisation of the district education administration in October 1971, each District Education Officer is assisted by one Deputy District Education Officer and one Sub-Divisional Education Officer at each civil Sub-division. If the District Education Officer is a man, the Deputy District Education Officer has to be a woman. The same position continues after the bifurcation of the Karnal district on January 23, 1973.

2. The district has been divided into 15 development blocks. For details see Chapter on 'Economic Trends'.

1	2	3	4	5	6	7
Municipal Committee, Panipat	6	4	—	—	—	—
Municipal Committee, Kaithal	4	3	—	—	—	—
Municipal Committee, Karnal	9	4	—	1	—	—
	684	60	76	16	18	2

As a consequence of provincialisation, the local bodies were required to pay their contribution annually to the Government towards the maintenance of the provincialised schools.

The position in respect of different grades of schools as well as colleges imparting higher education is discussed below :

Pre-primary schools.—Pre-primary education in the district is not widely organised. There is only one school at Nilu Kheri (Nilo Kheri) which is run by the Government. Despite this, pre-primary education has been gaining popularity and a few private schools have been started. Panipat, Karnal, Kaithal, Nilu Kheri (Nilo Kheri), Tirawari (Taraori), Thanesar and Shahabad (Shahbad) are the places which have pre-primary schools. In rural areas, the Central Social Welfare Board and Community Development Administration run 33 *balwadis* which look after the younger children.

Primary and basic schools.—The course of primary education covers a period of five years. Since April 1, 1961, primary education has been made compulsory. Starting with age-group 6-7 in 1961, it was extended to one higher class in each subsequent year so that by 1965 the age-group 10-11 could be covered. In 1970, there were 821 primary schools. Almost every *panchayats* area had a primary school. Out of the total of 1,350 villages (as enumerated at 1961 Census), 1,227 were covered under this scheme. The remaining 123 uncovered villages were served by the schools situated in the neighbouring villages. The education at this stage is imparted free and all such schools are mixed. Teachers are provided at the pupil-teacher ratio of 50:1. Single-teacher schools are very few and function only in villages and habitations with a small population because in such schools the number of students is also small. Most

of the teachers are either basic trained or oriented to the basic pattern. Under the basic system of education which has been accepted as the pattern of education, the primary schools are re-oriented to five-grade basic schools.

The medium of instruction is Hindi. According to the new policy adopted by the State Government in April 1967, the teaching of Hindi as the first compulsory language and as medium of instruction begins from Class I. English is taught from 6th class as second compulsory language. Sanskrit/Urdu/Punjabi/Telgu is taught as third compulsory language in Class 7th and 8th. Certain safeguards have also been provided for linguistic minorities. The teaching of Urdu/Punjabi as additional subject (in addition to Hindi) from the 1st primary class is made if there are 10 students in a class or 40 in a primary school or primary department of middle/high/higher secondary schools desirous to study this language. But the medium of instruction and the first language even for these students remain Hindi. If, however, a privately managed school had Panjabi as the medium of instruction before the creation of the new State of Haryana, i.e. November 1, 1966, the school is allowed to retain it. Five such schools in the Karnal district are : Shaikhupura Khalsa High School, Karnal; G.N. Girls High School, Karnal; Khanewal Khalsa High School, Shahabad (Shahbad); S.G.N.P. Girls High School, Shahabad (Shahbad); and G.N. Kanya Pathshala, Panipat.

Middle schools.—It was proposed to introduce compulsory education for all children up to the age of 14 years, but in view of the immense difficulties such as lack of adequate funds, continuous increase in population and inability of poor parents to buy even books for their children, it could not be translated into practice. Anyhow, the introduction of compulsory primary education has its impact on the enrolment at the middle stage. The primary schools are upgraded to middle schools according to their enrolment. The pupil-teacher ratio of 30 : 1 has been adopted for this stage and the education is free in all Government institutions. In 1970, there were 124 middle schools.

Secondary schools.—For a majority of students, the secondary education has to be of a terminal character. Only for a limited number who intend pursuing higher education it provides a preparatory stage. This postulates that secondary schools should offer a variety of courses calculated to meet the requirements of those who wish to earn their livelihood after completing the secondary education besides preparing a broad base for admission to higher courses of study. In order to pursue this aim and provide diversified courses, some high schools were converted into higher

secondary pattern. Conversion involves complex problems like funds for additional buildings and equipment and adequate trained personnel. Progress has, therefore, been slow. In 1970, there were 19 Government and 8 privately-managed higher secondary schools and 103 Government and 23 privately-managed high schools.¹

To encourage the education of boys and girls belonging to poor families, a reduced scale of fee is charged from them. The education is free for all whose family income is less than Rs. 1,000 per annum in the case of boys and less than Rs. 3,000 per annum in the case of girls. Boys whose family income is between Rs. 1,000 and Rs. 3,000 are charged fee at half the rates. Boys whose family income exceeds Rs. 3,000 per annum are charged fee at full rates whereas the girls in this category are charged fee at half the rates.

The students belonging to the Scheduled Castes and Other Backward Classes, who are studying in 9th, 10th and 11th classes, are given stipends at the rate of Rs. 6 per mensem² under the State Harijan Welfare Scheme provided income of their parents/guardians does not exceed Rs. 1,800 per annum. They are also allowed refund of examination fee. The students belonging to Scheduled Castes are exempted from the payment of tuition fee, but the students belonging to Other Backward Classes are allowed this concession subject to the above income condition. These concessions (varying from Rs. 15 to Rs. 25 per mensem) are also available to students belonging to Other Backward Classes at the Post-Matric Stage subject to the above income condition and that the eligible students have secured at least 40 per cent marks in their previous annual examinations.

The students belonging to Scheduled Castes are also given stipends under the Government of India Post-Matric Scholarship Scheme. The stipend includes refund of examination fee, tuition fee and other compulsory non-refundable charges. The rate of stipend varies from Rs. 27 to Rs. 75 according to different income slabs.

No tuition fee is charged from the children of serving defence personnel or of defence personnel who have been killed or disabled during the national emergency.

1. The policy of starting higher secondary schools (also called multi-purpose) with diversified elective groups (humanities, science, commerce, agriculture, fine arts, home science and technical) was initiated in 1957 on the recommendations of Mudaliar Commission (Secondary Education Commission). But the experiment did not prove a success and now the policy is to revert to the old high school pattern. The latest thinking, however, is to a 12-year schooling pattern.

2. The rate of stipend has been increased to Rs. 8 per mensem since 1970-71.

PUBLIC SCHOOLS

Sainik School, Kunjpura.—The school was established in July 1961. It is housed in the palace of the earstwhile Nawab of Kunjpura. The school acquired an estate which covers an area of 275 acres and includes a small lake and agricultural land adjoining the palace. It is situated on the Karnal-Kunjpura road.

The administration of the school is vested in an autonomous Board of Governors under the chairmanship of the Union Defence Minister. The school is a member of the Indian Public Schools Conference.

It is a residential school for boys. The admission is normally confined to the boys between 9 and 10 years as on the 2nd July of the year of admission. The admission is regulated through an all-India entrance examination. Sixty-seven per cent of the seats are meant for boys from the Haryana State. A few seats are reserved for the sons of defence service personnel and ex-servicemen.

The State Government awards a number of scholarships to the students. The scholarships are of the value of full fee, three quarters fee, half fee and are awarded on the basis of means-cum-merit. The school prepares boys for admission to National Defence Academy and the All-India Higher Secondary Examination conducted by the Central Board of Secondary Examination, New Delhi.

The school which started with 174 students in 1961, had 496 boys on its roll on March 31, 1970, excluding 18 day scholars (10 boys and 8 girls).

St. Theresa's Convent School, Karnal.—The school was opened in January 1961, under the patronage of the Bishop of Simla. It is run by the Sisters of the Little Flower, a religious order that runs several schools in various parts of India.

This institution is a high school and prepares for the Indian School Certificate Examination. In 1966, the school was affiliated to the Council for Indian School Certificate Examination, New Delhi. The students are taught courses in humanities, science, fine arts and physical education. There were 524 students including 230 girls, on its roll as on March 31, 1970.

HIGHER EDUCATION

The instruction in higher education was conspicuous by its absence prior to Independence for no institution for higher education was then in existence in the district. The phenomenon progress made in this behalf after 1947 is

evidenced from the data given below :

Name of institution	Year of establishment	Number of scholars on roll								
		1951-52			1960-61			1969-70		
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
1. Dyal Singh College, Karnal	1949	445	43	488	795	94	889	1,522	70	1,592
2. R.K.S.D. College, Kaithal	1954	—	—	—	309	4	313	1,005	195	1,200
3. Arya College, Panipat	1954	—	—	—	521	—	521	809	286	1,095
4. Inder Bhan Bharatri College, Panipat	1956	—	—	—	—	122	122	373	296	669
5. D.A.V. College for Women, Karnal	1957	—	—	—	—	145	145	—	855	855
6. Government College, Kurukshetra	1961	—	—	—	—	—	—	903	204	1,107
7. Janta Agricultural College, Kaul	1965	—	—	—	—	—	—	141	—	141
8. Arya Kanya Mahavidyalaya, Shahtad Markanda	1968	—	—	—	—	—	—	—	134	134
9. S. D. College, Panipat	1969	—	—	—	—	—	—	559	88	647
10. Indira Gandhi Mahila Maha Vidyalaya, Kaithal	1970	—	—	—	—	—	—	—	—	—
11. Gandhi Adarsh College, Samalkha	1970	—	—	—	—	—	—	—	—	—

The above colleges, which are affiliated¹ to the Panjab University, Chandigarh, are described in brief :

(1) **Dyal Singh College, Karnal.**—The Dyal Singh College, originally started at Lahore, owes its existence to the munificence of the late Sardar Dyal Singh Majithia. The Dyal Singh College Trust Society laid the foundation of this college there on May 3, 1910. At the time of the Partition in 1947, the entire

1. All the colleges in Haryana have been affiliated to the Kurukshetra University, Kurukshetra, since July 1974.

assets of the trust were left in Lahore. The lofty idealism which had inspired the activities of the trust in its long career of service at Lahore, was not dimmed by the catastrophe. After a survey of the educational requirements of different parts of the then East Punjab and considering other cognate problems, the trustees established the Dyal Singh College at Karnal on September 16, 1949. The college is housed in Umar Manzil, an evacuee building with ample space for playgrounds, extra mural and co-curricular activities. A new science block, a canteen, a common room for the resident students and some more class-rooms are the recent additions. It is also proposed to construct a gymnasium.

The college is affiliated to the Panjab University for Pre-University (Arts and Science), Pre-Engineering, Pre-Medical, B.A. and B.Sc. It had 1,592 students including 70 girls on its roll on March 31, 1970.

(2) **R.K.S.D. College, Kaithal.**—The college was started in May 1954 by the Rashtriya Vidya Samiti, Kaithal. It was originally started in a private building lent *gratis* but in 1959 it was shifted to its own newly-constructed building on the Kaithal-Ambala Road. The college is affiliated to the Panjab University and prepares students for Pre-University (Arts and Science), Pre-Engineering, Pre-Medical, B.A. and B.Sc. There were 1,200 students including 195 girls, on its roll on March 31, 1970.

(3) **Arya College, Panipat.**—Situated on the National High Way No. 1 (popularly known as Grand Trunk Road), Arya College, Panipat, was established in 1954. The college is managed by a local Managing Committee appointed by the Arya Pratinidhi Sabha. A separate section for girls was added in 1961. A separate building was also constructed for this section in 1965. Thus the classes are held separately for boys and girls in separate buildings. Besides extensive playgrounds and hostel amenities, the college has a rich library, well-equipped laboratories, a shooting range, a workshop and a museum.

The college is affiliated to the Panjab University for Pre-University (Arts, Science and Commerce), Pre-Engineering, Pre-Medical, B.A., B. Com., B.Sc. and M.A. (for girls only) in History, Economics and Political Science. It had 1,095 students including 286 girls on its roll on March 31, 1970.

(4) **Inder Bhan Bharatri College, Panipat.**—The college though started as a women college in 1956, was affiliated to the Panjab University in 1961. It was made a co-educational institution in 1966-67. It prepares students for Pre-University (Arts, Commerce and Science), Pre-Engineering, B.A., B.Sc. and B.Com. It had 669 students including 296 girls on its roll on March 31, 1970.

D.A.V. College for Women, Karnal.—This institution was established in 1968 with a view to provide training facilities to female students of the area. It is managed by the local D.A.V. Managing Committee.

The college maintains a library which is stocked with 1,945 books on different subjects. It has its own playgrounds for various games, *i.e.* hockey, volley ball, badminton, etc. Besides, it has a separate audio visual room equipped with wall-maps, plastic maps, globes, scientific and biological models, charts, portraits of eminent poets and scientists, etc. The college equipment also include a projector and an epidiascope.

The college provides financial help to poor students. The year-wise number of students on its rolls from 1968-69 to 1971-72 was as given below:

Year	Number of students	
1968-69	150	
1969-70	120	
1970-71	100	} The university allowed only two units, each consisting of 50 students of B.Ed. classes.
1971-72	100	

(6) Government College, Kurukshetra.—The Government established a college for women at Kurukshetra in 1961 as a constituent college of Kurukshetra University. The college prepared the students for Pre-University, Pre-Medical, B.A. and B.Sc. In August 1963, the college was converted into Sports College for Women, providing additional facilities for attaining better standards in sports. But in July 1967, it was converted into a co-educational Degree College. The undergraduate classes run by the Kurukshetra University were discontinued and attached to this college. It prepares the students for Pre-University (Arts and Science), Pre-Medical, Pre-Engineering, B.A., B. Co m. and B.Sc. There were 1,107 students including 204 girls on its roll on March 31, 1970.

(7) Janta Agricultural College, Kaul.—The college was established in 1965 by raising Janta Higher Secondary School, Kaul, to the status of a degree college. Since the college is located within the radius of 10 miles of Kurukshetra University, it is affiliated to it and functions as its constituent

institution. It prepares students for Pre-University and B.Sc. (Agriculture). There were 141 students (boys) on its roll in 1970.

(8) Arya Kanya Mahavidyalaya, Shahbad Markanda.—This college for girls which was established in 1968 in the memory of Swami Daya Nand, is situated on the Barara Road. The college has its own playgrounds. It also maintains a library which is stocked with about 1,500 books on different subjects.

It is affiliated to the Panjab University and prepares students for Pre-University (Arts) and B.A. (Three-Year Degree Course). In 1969-70, 134 students were on its roll. This number included three students belonging to the Backward Classes.

(9) S.D. College, Panipat.—This college is an extension of the S.D. Higher Secondary School for Boys, Panipat and started functioning in July 1969. It is managed by the Sanatan Dharam Education Society, Panipat.

The college is affiliated to the Panjab University. It prepares students for B.A., B.Sc. (Medical and Non-Medical), and B. Com. (Three-Year Degree Course). In 1969-70, 647 students (559 boys and 88 girls) were on its roll.

(10) Indira Gandhi Mahila Maha Vidyalaya, Kaithal.—The growing need of a college for women in Kaithal and its surrounding areas prompted the Bal Shiksha Samiti, Kaithal to establish this institution in April 1970. It is situated on Kaithal -Karnal Road.

The Vidyalaya has a library stocked with 1,306 books on different subjects. It also subscribes to a number of journals, magazines and newspapers. The Vidyalaya has vast playgrounds for different games and has also made provision in its plan for the construction of a museum, a swimming pool, a hostel-block and an auditorium with a seating capacity of 1,000. However, a teachers' hostel is under construction.

It is affiliated to the Panjab University and prepares students for Pre-University (Arts) and B.A. (Three-Year Degree Course). It has a separate Home Science Block holding classes in Home Science which has been introduced from 1971-72 session.

In the very first session of 1970-71, the number of students on its roll was 192 which rose to 332 in 1971-72.

(11) Gandhi Adarsh College, Samalkha.—This college was established in July 1970 by the Samalkha Education Society. It has its own playgrounds

for different games and also maintains a library stocked with 1.251 books on various subjects.

It is a co-educational institution and is affiliated to the Panjab University. It prepares students for Pre-University (Arts and Commerce) and B.A. (Three-Year Degree Course).

In 1970-71 session, there were 128 students (120 boys and 8 girls) on its roll.

KURUKSHETRA UNIVERSITY, KURUKSHETRA

While educational institutions at different stages were established in the post-Partition period it was found that there was no institution corresponding to the Oriental College, Lahore, on this side of the Punjab. In 1956, Kurukshetra University was established to fill this gap.

Originally planned as a seat of oriental and Asian thought and learning and initially having only a department of Sanskrit, it has grown into a multi-faculty university, teaching various subjects in the faculties of Arts and Languages, Science, Social Science, Indic Studies, Education, Engineering, Technology and Law. The main purpose of the university, the only one located in Haryana, is to provide encouragement for higher education and research, especially in Sanskrit, Prakrit and Modern Indian Languages as also in Indian Philosophy, Ancient Indian History and other aspects of Indology.

It is unitary teaching and residential university. A piece of 400 acres (162 hectares) of land was acquired for the university campus amidst picturesque surroundings at a distance of about two and a half kilometres from Thanesar town. This site near the sacred tank of Kurukshetra was chosen by the sponsors of the university because of its historical significance.

A distinctive feature of the university is its residential character. Eight hostels (five for boys and three for girls) having all the modern amenities cater to the needs of the students. Separate residential houses have also been provided to the staff. Thus it offers excellent opportunities for the development of a variety of co-curricular activities. There are extensive playgrounds for hockey, cricket, foot-ball, volley-ball, athletics and other games. A sports pavillion and an open-air theatre also exist. The university campus buildings are a distinctive blend of architecture. The campus is a full-fledged township with its own market, a post and telegraph office, a hospital, a dispensary and other amenities. A multi-storeyed library building which will house, in the

initial stage, over half a lakh volumes besides six thousand volumes of rare books and ancient unpublished manuscripts, is under construction.¹ An auditorium which will be most modern in the country, is also under construction besides the Teachers' Club and the Arts Block.

The university acquired a cyclotron machine in 1966 as a gift from the University of Rochester (U.S.A.) for organising a department of nuclear physics research. This machine, the first of its kind in an Indian university, was, however, shifted to the Panjab University, Chandigarh in July 1969.

The Government College, the College of Education and the Regional Engineering College are the three constituent parts of this university and are located on its campus. Besides, Janta Agricultural College, Kaul, is an affiliated college of this university.² All these four institutions have been described separately in this chapter.

In 1970, thirty-two teaching departments, as detailed below, were functioning in the university:

1. Department of Sanskrit, Pali and Prakrit
2. Department of Hindi
3. Department of English
4. Department of Philosophy, Indian Philosophy and Religion
5. Department of Library Science
6. Department of Mathematics
7. Department of History
8. Department of Economics

1. The library housed in its new impressive building with an air-conditioned research room, has on its shelves 1,20,000 books, out of which approximately 5,000 are rare out of print. The library is subscribing to 1,700 periodicals in various subjects. Its manuscript section has more than 3,500 manuscripts. (*Souvenir* published by the Department of History, Kurukshetra University, Kurukshetra, for the Tenth Annual Conference of the Institute of Historical Studies, October 28-31, 1972)

2. Having become a full-fledged affiliating University on June 30, 1974, all the colleges in Haryana have been affiliated to the Kurukshetra University since July, 1974.

9. Department of Political Science
10. Department of Physics
11. Department of Chemistry
12. Department of Education
13. Department of Ancient Indian History, Culture and Archaeology
14. Department of Linguistics and Folk-lore
15. Department of Military Studies
16. Department of Applied Sciences
17. Department of Civil Engineering
18. Department of Electrical Engineering
19. Department of Mechanical Engineering including Workshop
20. Department of Agriculture
21. Department of Botany
22. Department of Zoology
23. Department of Geography
24. Department of Law
25. Department of Panjabi
26. Department of Music
27. Department of Home Science
28. Department of Fine Arts
29. Department of Commerce
30. Department of Modern European Languages
31. Department of Psychology
32. Department of Electronics and Communication Engineering

The following statement shows the number of students and teachers on rolls of the teaching departments including constituent and recognised colleges

of the Kurukshetra University since its inception:—

Year	Number of students			Number of teachers		
	Boys	Girls	Total	Men	Women	Total
1	2	3	4	5	6	7
1956-57	—	—	—	—	—	—
1957-58	15	—	15	6	—	6
1958-59	24	—	24	7	—	7
1959-60	30	—	30	7	—	7
1960-61	82	14	96	18	1	19
1961-62	392	108	500	61	23	84
1962-63	605	192	797	103	26	129
1963-64	877	395	1,272	132	28	160
1964-65	1,000	507	1,507	161	28	189
1965-66	1,334	609	1,943	200	26	226
1966-67	1,840	671	2,511	227	31	258
1967-68	2,651	730	3,381	239	31	270
1968-69	3,184	780	3,964	276	32	308
1969-70	3,660	700	4,360	361	31	392
1970-71	4,110	676	4,786	329	30	359

PROFESSIONAL AND TECHNICAL EDUCATION

The Regional Engineering College, Kurukshetra.—The college is one of the 15 regional engineering colleges sanctioned by the Government of India. It was established at Kurukshetra in 1965. The college imparts technical education leading to the B.Sc. (Engineering) degree of the Kurukshetra University. It is a five-year integrated course in Civil, Mechanical and Electrical Engineering. The sanctioned intake of the college is 250; 70 for civil engineering, 90 for mechanical engineering and 90 for electrical engineering.

The college functions as an autonomous body and its management is entrusted to a Board of Governors comprising representatives of the State

Government, the Union Government, Industry and Commerce and All-India Council for Technical Education.

Though admission is not barred to girl students, there were 890 students (all boys) on its roll on the 31st March, 1970 .

Haryana Polytechnic, Nilu Kheri (Nilo Kheri).—After the Partition, the Government established an Engineering School at Gurdaspur in November 1947. The institution was shifted to Chhachhrauli in November 1950 and to Nilu Kheri (Nilo Kheri) in October 1951. On May 20, 1958, Government School of Engineering, Nilu Kheri (Nilo Kheri), and Nilokheri Polytechnic were merged and the combined institution was named as Punjab Polytechnic, which after the creation of Haryana State has been re-named as Haryana Polytechnic.

The institution has two distinct courses; diploma course in Civil, Electrical and Mechanical Engineering, and Junior Technical School course. It is affiliated to the State Board of Technical Education, Haryana and is a residential institution with ample hostel accommodation. There were 521 students (all boys) on its roll on March 31, 1970.

National Dairy Research Institute, Karnal.—The institute is a national centre for research, teaching and extension work in dairying. Its history goes back to 1923 when the Imperial Institute of Animal Husbandry and Dairying was established at Bangalore (Mysore State). After Independence this institute emerged as the Indian Dairy Research Institute with greatly enhanced research and training facilities. With a view to provide better facilities for advanced training and research in dairying to meet the growing requirements of the dairy industry in India, the institute was shifted to Karnal in 1955 as the National Dairy Research Institute. The erstwhile Bangalore Institute became the Southern Regional Station. Subsequently, two more regional stations were established; the one at Bombay in 1961 and the other at Kalyani in 1964. The institute has been under the administrative control of the Indian Council of Agricultural Research since 1966.

The institute occupies an area of 721 hectares, mainly between the main Western Jumna (Yamuna) Canal and the Grand Trunk Road. Of this, approximately 354 hectares are under fodder and perennial grasses. The institute has a herd of 1,225 Red Sindhi, Sahiwal, Tharparkar cows and Murrah buffaloes, and 80 cross bred animals. About 3,250 litres of milk are produced daily for processing and manufacture of products in the institute's experimental dairy.

The institute endeavours toward advancement of dairying in the country through a coordinated programme of dairy research, education and extension. The main functions of the institute are:

- (a) Conducting research on problems of breeding, management, physiology and feeding of dairy cattle for maximisation of milk production, processing of milk and manufacture of its products, engineering aspects of dairy plant and equipment, economics of milk production and processing, extension methodology, chemical, bacteriological and nutritional aspects of milk and milk products.
- (b) Imparting training at the diploma, degree and post-graduate level, and through specialised courses.
- (c) Disseminating information and performing advisory service to the dairy industry.
- (d) Assist in formulation of standards for milk products, dairy equipment, buildings, etc.

The institute is one of the three national institutes in the field of agriculture.¹ The regional stations assist in disseminating the results of research achieved at the headquarters, besides engaging in the study of problems identified for the region.

The work of the institute is organized in eight divisions: Dairy Bacteriology, Dairy Chemistry, Dairy Engineering, Dairy Husbandry, Dairy Extension, Dairy Economics, Dairy Statistics and Dairy Technology. There is a separate division of Dairy Education and Training. This division is concerned with co-ordination of teaching and planning and organization of different training courses at the institute. The Dairy Science College is affiliated to the Panjab University² for graduate and post-graduate training, and also with several other Universities for Doctorate training. The educational programme of the institute is designed to provide both broad-based and specialized courses of training in dairying and prepares students for various technical and managerial positions in dairies and for teaching and research. The courses given at Karnal and Bangalore, together with their duration are shown in Table XLIII of Appendix.

The institute has well stocked library with about 22,500 volumes of books, back volumes of journals and special publications are also available. The library

1. The other two national institutes are : Indian Agricultural Research Institute, New Delhi and Indian Veterinary Research Institute, Izatnagar (Uttar Pradesh).
2. Since July 1974, this college has been affiliated to the Kurukshetra University.

also operates documentation service and contains about 540 current periodicals on different subjects pertaining to dairy science.

The institute had 314 students on its roll on the 31st March, 1970. Due to lack of hostel facilities only boy students are admitted for the present.

MEDICAL EDUCATION

A Nursing Training School is attached to the Civil Hospital, Karnal. This school provides training facilities to 60 girls in the General Nursing Course.

TEACHERS' TRAINING

The following institutions prepare students for teachers' training degrees/diplomas as shown against each:

Name of institution	Degrees/ Diplomas awarded	Duration of the course
1	2	3
The College of Education, Kurukshetra	B.A./B.Sc. (Education)	4 years
	B.Ed.	1 year
D.A.V. College of Education for Women, Karnal	B.Ed.	1 year
Rural College of Education, Kaithal	Do	Do
Government Basic School, Naguran	J.B.T.	2 years
Government Girls Higher Secondary School, Kaithal	Do	Do
Government Higher Secondary School, Kunjpura	Do	Do
Government High School, Tirawari (Taraori)	Do	Do
Government High School, Pehowa	Do	Do
Government High School, Karora	Do	Do
Government High School, Karibans	Do	Do
Government High School, Pundri	Do	Do
Government Normal School, Karnal	Do	Do
Government High School, Indri	Do	Do

1	2	3
Government High School, Ladwa	J.B.T.	2 years
Gandhi Samarak Middle School, Patti Kalyana	Do	Do
D.A.V. Girls High School, Karnal	Do	Do
Lalita Shastri S.D. High School, Nilu Kheri (Nilu Kheri)	Do	Do
Har Kaur Arya Girls High School, Panipat	Do	Do
Jat High School, Kaithal	Do	Do
Arya Higher Secondary School, Panipat	Do	Do
Jat Higher Secondary School, Kaithal	Do	Do
S.M.B. Gita High School, Kurukshetra	Do	Do
A.S. High School, Pundri	Do	Do
Kasturba J.B. School, Radaur	Do	Do
G.M. High School, Naraina	Do	Do
Arya High School, Thanesar	Do	Do

The College of Education, Kurukshetra.—The college which was established by the Government in 1960 as a constituent college of the Kurukshetra University is a new type of institution for the training of teachers. It offers an integrated course of four years after Matriculation and three years after Higher Secondary or Pre-University leading to B.A. B.Ed./B.Sc., B.Ed. degrees. It provides instruction for academic and pedagogical subjects concurrently. The college does not charge any tuition fee from the students belonging to Haryana State and similarly a merit scholarship of Rs. 25 each per month is awarded to the first 50 students in each class. In 1967, one unit of B.Ed. (one year course) was also started in the college.

There were 398 students including 159 girls on its roll on March 31, 1970.

D.A.V. College of Education for Women, Karnal.—The college was

established in July 1968. It is affiliated to the Panjab University for B.Ed. There were 116 students (all girls) on its roll on March 31, 1970.

Rural College of Education, Kaithal.—This college was established in July 1970 for providing training facilities to graduates belonging to the rural areas. It is managed by the Haryana Rural Education Society, Kaithal, and is situated on the Karnal-Kaithal Road at a distance of about one mile (1.6 kilometres) from the railway station and half a mile (0.8 kilometre) from the bus stand.

The college provides hostel facilities for both boys and girls. The boys' hostel can accommodate fifty students whereas girls' hostel has an intake capacity of only ten. It is proposed to construct a new and bigger hostel for girls on modern lines in the near future.

The college maintains a library which is stocked with 1,588 books on different subjects. It has its own playgrounds for various games while a swimming tank is being constructed on its campus. An agriculture farm covering an area of 625 bighas of land is also attached to the college which is expected to yield an average income of Rs. 50,000 to the college in due course.

It is affiliated to the Panjab University and prepares students for B.Ed. In 1970-71, 124 students (101 boys and 23 girls) were on its roll. In 1971-72, O.T. class, which prepares Language Teachers, was added. In all, 40 seats have been sanctioned for this class.

TECHNICAL EDUCATION

The development of Industries, whether in public or private sector, requires the services of trained and skilled personnel. To meet the increasing demand of such personnel in the cottage industries, three Industrial Training Institutes were opened in the district at Panipat, Kaithal and Karnal. This list also includes four Government Industrial Schools for Girls one each at Panipat, Karnal, Pundri and Shahabad (Shahbad)], Government Industrial Training Centre, Pundri and Rural Arts and Training Centre, Kaithal. All of these have been functioning under the administrative control of the Director, Industrial Training, Haryana, Chandigarh.

Industrial Training Institute, Panipat.—This institute was started in February 1962. It is situated on the Grand Trunk Road at a distance of 4½ kilometres from the bus stand. It imparts training to both male and female students in the trades detailed below. The number of seats for each trade and the

duration of the course have also been given:

Trade 1	Number of seats	
	Two-year course 2	One-year course 3
Engineering Trades		
1 Electrician	48	
2 Fitter	32	
3 Turner	24	
4 Electroplator	16	
5 Carpenter		16
6 Tractor Mechanic		32
7 Motor Mechanic		32
8 Welder		24
9 Moulder		16
10 Painter and Decorator		16
11 Sheetmetal		16
Non-Engineering Trades		
12 Dyeing and Calico		16
13 Steno (English)		32
14 Steno (Hindi)		32
15 Cutting and Tailoring		48
16 Weaving of Fancy Fabrics Furnishing		16
17 Weaving of Wool		16
18 Embroidery		16
19 Weaving of Carpets		16
Total	120	344 = 464

The training imparted is of National Trade Certificate level and carries all India recognition. Financial assistance is also given to certain specified categories of students at varying scales. A stipend of Rs. 25 per mensem per student is awarded on poverty-cum-merit basis to 33½ per cent of the total number of students on roll. The stipend is paid at the rate of Rs. 45 per mensem to the members of the Scheduled Castes. The ex-servicemen and their children receiving training are awarded stipend by the State Soldiers', Sailors' and Airmen's Board. Besides free technical training, the students are provided free medical aid, workshop clothing and hostel accommodation. The institute has a well equipped library of books on technical subjects.

There were 321 trainees on roll (246 boys and 75 girls) during 1969-70 session.

Industrial Training Institute, Kaithal.—This institute was started on August 1, 1963. Housed in a spacious modern factory type building, it is situated on Kaithal-Hissar Road at a distance of about 2 kilometres from the bus stand.

This institute imparts training to both male and female students in various trades, viz. Carpenter, Fitter, Electrician, Turner, Moulder, Machinist, Wireman, Welder and Motor Mechanic. The intake capacity of each of these trades is sixteen except in the trades of Turner and Welder in which case it is twelve. The total number of seats in the institute is 344. The training imparted is of National Trade Certificate level and carries all-India recognition. The training period ranges from one year to two years. Besides free technical training, the students are provided free medical aid, workshop clothing and hostel accommodation. Financial assistance is also given to certain specified categories of students at varying scales. A stipend of Rs. 25 per mensem per student is awarded on poverty-cum-merit basis to 33½ per cent of the total number of students on roll. The stipend is paid at the rate of Rs. 45 per mensem to the members of the Scheduled Castes, Rs. 100 to ex-servicemen and Rs. 40 to their dependants.

The library of the institute is well stocked with books on technical subjects. Facilities also exist for indoor and outdoor games like volleyball, football and hockey.

The institute has a well equipped workshop, a theory room, an administrative block and a hostel for the trainees. Twenty staff quarters have also been constructed on the campus of the institute.

There were 82 trainees on the roll on March 31, 1971. This included 22 female trainees.¹

Industrial Training Institute, Karnal.—Situated at Kunjpura Road (on the by-pass) at a distance of about 3 kilometres from the bus stand, this institute was started in August 1963 and has been housed in a spacious accommodation in a modern factory type building. The training at this institute is imparted to both male and female students in the trades of Electrician, Wireman, Turner, Fitter, Machinist, Diesel Mechanic, Motor Mechanic, Tractor Mechanic, Carpenter, Welder and Moulder, Cutting and Tailoring and Stenography in Hindi and English. The training period for the first five trades is two years while it is one year for the rest. The intake capacity of these trades is sixteen each except in the trades of Machinist, Turner and Welder in whose case it is twelve. The total number of seats in the institute is 576. The training imparted is of National Trade Certificate level and carries all-India recognition. Financial assistance is also given to certain specified categories of students at varying rates. A stipend of Rs. 25 per mensem per student is awarded on poverty-cum-merit basis to 33½ per cent of the total number of students on roll. The stipend is paid at the rate of Rs. 45 per mensem to the members of Scheduled Castes, Rs. 100 to ex-servicemen and Rs. 40 to their dependants.

Besides free technical training, the students are provided free medical aid, workshop clothing and hostel accommodation. The institute has a well equipped library on technical subjects. The students are also provided with facilities for outdoor and indoor games. The institute has a well equipped workshop and separate theory rooms, an administrative block, dispensary, cycle stand, canteen and a hostel building which can accommodate 250 trainees. Twenty eight staff quarters have been provided in addition to the residence for the Principal. The trainees' strength on March 31, 1970 was 258 which included 73 females.

The institutions, mentioned below, provide facilities for diploma/certificate courses in various trades/crafts shown against each :

Name of institute	Year of establishment	Trades/Crafts
1	2	3
Government Industrial School for Girls, Panipat	1947	Cutting and Tailoring, Embroidery and Needle-work

1. The institute remained closed for one year, i.e. August 1969 to July 1970. As such there was no student on its roll on March 31, 1970.

1	2	3
Government Industrial School for Girls, Karnal	1960	Cutting and Tailoring, Embroidery and Needlework
Government Industrial School for Girls, Pundri	1964	Cutting and Tailoring, Machine and Hand Embroidery
Government Industrial School for Girls, Shahabad (Shahbad)	1964	Cutting and Tailoring, Embroidery and Needle work
Government Industrial Training Centre, Pundri	1966	(i) Cutting and Tailoring (ii) Weaving of Fancy Fabrics Furnishing (iii) Manufacture of Footwear (iv) Carpentry
Rural Arts Training Centre, Kaithal	1963	Weaving, Leather, Carpentry and General Mechanic

EDUCATION OF THE HANDICAPPED

As the number of handicapped persons is considerable, it is essential as a social and moral obligation to provide a special type of training and education to them which will develop them into useful citizens. With this end in view, the Government Institute for the Blind was started at Panipat by the State Social Welfare Department in October 1957, for the education of the blind children. The purpose of the institute is to educate, train and rehabilitate the blind so as to make them self-supporting.

Besides general education, the students receive training in different vocations. They are taught handloom weaving, *niwar* making, candle making, caning of chairs, and playing musical instruments. Sports and physical education form a part of the training. The students receive free training and are provided with free board, lodging, clothing and bedding. There were 95 students (94 boys and one day-scholar girl) on the roll on March 31, 1970.

GURUKUL EDUCATION

Side by side with modern educational institutions, the old type of Gurukuls continue to give education at Kurukshetra and Gharaunda.

The main purpose of these institutions is to teach Sanskrit and Hindi in order to impart the knowledge of the Vedas and other *Shruti* lore. The students are given physical training and they are required to maintain a rigid discipline according to the ancient accepted ideas.

The Vidya Vihar Gurukul, Kurukshetra, was established on April 13, 1913, by Swami Shraddha Nand. Situated three miles away from Kurukshetra Railway Station on the Thanesar-Pehowa Road, adjoining Kurukshetra University, it is managed by Arya Pratinidhi Sabha, Punjab, Jullundur. It is a residential institution for boys. There is no tuition fee but maintenance allowance varying from Rs. 26 to Rs. 36 per month is charged. The institution is affiliated to Gurukul Kangri University for Vidya Adhikari (Matric). There were 113 students on its roll in 1970.

Shri Ved Vidyalyaya Gurukul, Gharaunda, was established in April 1939. It is situated opposite Gharaunda Railway Station. It is a residential institution for boys. There is no tuition fee but maintenance allowance of Rs. 20 per month is charged. The institution prepares students for Pragma, Visharad and Shastri examinations of the Panjab University, Chandigarh and Prathama, Madhyama and Shastri examinations of Banaras Hindu University. There were 60 students on its roll in 1967.

Social Education.—Adult literacy is considered an important part of social education. Previously a few voluntary organisations like Social Workers Home, Karnal, and Gram Sudhar Ashram, Rattangarh, held adult literacy classes for which grant was given by the Government. The Municipal Committee, Shahabad (Shahbad) was also running 2 social education centres, one for men and the other for women. All these organisations ceased to function in 1967 when the Government opened 5 social education centres at Panipat, Radaur, Samalkha, Shahabad (Shahbad) and Thanesar. These centres had whole time social education workers and provided recreation programmes like indoor games, film viewing, radio listening, etc. The centres for women had the facilities for training in tailoring, embroidery and knitting besides 3 R's (reading, writing and arithmetic) and lessons in child care, home management and citizenship. Not being able to function successfully, these centres were closed in October 1967.

NATIONAL FITNESS CORPS

In order to develop character and discipline and to make the children physically fit, the late General J. K. Bhonsle started the National Discipline Scheme. The scheme created a new awakening in the field of physical

education culminating in the formulation of the National Fitness Corps Programme which is comprehensive in its scope of physical education. The good points of all schemes relating to physical education were incorporated in the scheme of National Fitness Corps and an integrated syllabus was evolved. The programme includes exercise tables, drill and marching, lezium, gymnastics and folk-dances, major and minor games and relays, track and field events, tests and hiking, combatives and national ideals and good citizenship, practical projects and community singing of the National Anthem and patriotic songs.

In the Karnal district, the scheme is implemented under the general supervision of the District Education Officer who is assisted by an Assistant Education Officer. The physical training is being re-oriented towards this new programme. One Instructor has been provided in all the high and higher secondary schools whereas in middle and primary schools, it is proposed that teachers should be given training and made in charge of the programme.

National Cadet Corps.—National Cadet Corps (N.C.C.) Scheme was introduced in the educational programme in 1948 to develop the qualities of leadership, unity and discipline. Later in July 1963, after the Chinese aggression, it was made compulsory for all able-bodied undergraduate boy students at college level. The N.C.C. training is imparted regularly during academic sessions and through out door camps. From 1968, two other programmes namely National Service Corps and National Sports Organisation have been introduced as alternatives to N.C.C.

N.C.C. is organised in the district through N.C.C. Group Headquarters, Ambala Cantt. It has under its jurisdiction five N. C. C. units in the Karnal district, viz. 7 Haryana Battalion N.C.C. Karnal ; 10 Haryana Battalion N.C.C., and 1 Haryana Naval Unit, Kurukshetra ; 12 Haryana Battalion N.C.C., Panipat, and 2 Haryana Air Squadron N.C.C., Karnal, covering cadets of Senior Division in colleges and Junior Division in schools. In 1969-70, five cadets of Air Squadron N.C.C., Karnal, completed their solo record within the authorised flying hours.

SPORTS

Sports activities in the district include *panchayat* tournaments at the block and district levels, school tournaments at the zone and district levels and open tournaments at the district level.

The holding of *panchayat* tournaments at the block and district levels was the responsibility of the Panchayat Samitis and Zila Parishad¹ respectively. Representative teams from different *panchayats* take part in block tournaments and then block teams compete in the district *panchayat* tournament.

The District School Tournament Committee consists of elected members from various schools, with District Education Officer as its *ex officio* Chairman. It organises school tournaments at the zone and district levels, separately for middle schools and high and higher secondary schools.

A number of open tournaments in various games are also held by the district sports associations concerned.

Promotion of sports.—For promotion of sports, the State Government established the office of the District Sports Officer at Karnal in 1962. A sports centre was also started the same year to provide free coaching facilities daily to students and non-students of both the sexes. In this centre free coaching is provided in hockey, football and athletics by coaches trained from the National Institute of Sports, Patiala.

LIBRARIES AND MUSEUMS

Before Independence only schools and colleges had their libraries which were open only to the students and teachers of those institutions. The Bar Library at Karnal met the professional requirements of its members and the Municipal Libraries at Karnal and Panipat catered to the needs of the public at large. The library movement gained momentum after Independence. Village libraries were introduced in 1950 when some *panchayats* collected subscriptions and opened village libraries and reading rooms.

By 1969-70, there were 1,159 libraries and reading rooms in the district. Of these, 758 libraries were owned by colleges and schools for use of their students and staff; 380 were under gram *panchayats*. The remaining 21 libraries as shown below were maintained by the local bodies and private organisations :

Karnal

Gandhi Memorial Library, Jaton Mohalla Library,
Police Library, Arya Samaj Library, Manav Sewa
Sangh Library, Partap Library and Jain Library

1. After the abolition of the institution of Zila Parishad on June 13, 1972, the district level tournament has been made the responsibility of the Additional General Assistant under the overall control of the Deputy Commissioner.

Panipat	Gandhi Municipal Library and Kamalia Bradari Library
Kaithal	Municipal Library and Sudhar Sabha Reading Room
Kurukshetra	Gita Bhawan Library
Nilu Kheri (Nilo Kheri)	Public Library and Extension Education Centre Library
Ladwa	Municipal Library
Gharaunda	Municipal Library
Thanesar	Municipal Library
Radaur	Municipal Library
Pundri	Municipal Library
Shahabad (Shahbad)	Municipal Library
Kaul	Janta Agricultural College Library
Pehowa	Municipal Library

VIJNAN MANDIR, NILU KHERI (NILO KHERI)

The scheme of Vijnan Mandir was started by the Government of India to impart a scientific insight to the people at large. The Vijnan Mandir, Nilu Kheri was established on January 10, 1958 to disseminate scientific knowledge and create a scientific temper among the people. It comprises a science museum, a laboratory and a library. The museum has specimens of botanical, zoological and geological importance. A large number of specimens like intestinal worms, human foetus, internal organs of body, dissected specimens of the animals, poisonous and non-poisonous snakes, different kinds of fish and sea animals have been preserved and displayed. The specimen of the Siamese Twins and million-years-old fossils of plants offer a special attraction to the visitors. The charts on health and hygiene, snakes, insects, birds, plant diseases and evolution are other enlightening features.

In order to develop a taste for scientific learning and provide a forum for discussion on science topics, the Vijnan Mandir has organised science club in schools and in villages. The meetings of these clubs are held

periodically and talks are given on topics such as personal hygiene, diet and nutrition, important diseases and their preventive control measures, useful and harmful bacteria, inter-dependence of plants and animals, life histories of great scientists and their discoveries and inventions, simple scientific principles and their application in every day life. Science talent competitions are also held annually in order to pick up brilliant school-leaving scholars who have potentiality for advance scientific training.

Since April 1963, the administrative control of the Vijnan Mandir has been transferred to the District Education Officer.





सत्यमेव जयते

Chapter XVI

MEDICAL AND PUBLIC HEALTH SERVICES

BACKGROUND

No records are available about the state of public health and medical facilities that obtained in the district in early times. However, in the 19th century, the district is known to have been insalubrious. Each year a large area which was covered with water and aquatic plants in the rainy season became the breeding ground for mosquitoes. Malaria poisoned the blood of a good number of villagers and killed them by fever and enlarged spleen.

The malaria epidemic of 1841—43 assumed special virulence and caused even the abandonment of Karnal as a cantonment in 1843. This led to the investigation into the matter by the Government and its report was published in 1847. But the position did not improve. In 1856, the people of many of the badly affected villages abandoned their homes and fled to Jind. In many places, the water-level had arisen due to seepage from the Western Jumna (Yamuna) Canal from some 60 feet to the two or three feet below the surface. The fertility of the soil had thus been diminished. It was feared that the evil would continue to spread almost indefinitely. From the sanitary point of view, it was found that the position had deteriorated considerably since 1847. Malaria continued to present the spectacle of sick women and diseased children crouching among the ruins of their houses (for in many cases the rafters had been sold), of haggard cultivators wading in the swamps, and watching their sickly crops, or attempting to pasture their bony cattle on the unwholesome grass.¹

In 1867, Surgeon-Major Adam Taylor was appointed to make a further inquiry. He found that 60 to 80 per cent of the inhabitants in many of the Bangar villages were suffering from enlarged spleen and yearly attacks of fever. He spoke of the languor and depression of manner, and stunted and shrivelled forms of the inhabitants of the villages in close proximity to the swamps ; and of the absence of the strength to repair damage or to preserve comfort. The heavy rains of 1871—76, resulting in a severe form of

1. *Karnal District Gazetteer*, 1883-84, pp. 270-71.

malaria, rendered the sanitary condition of the canal villages worse than ever.¹

The medical facilities to cope with this horrible state of public health were limited to a few Unani and Ayurvedic practitioners. In 1861, the first allopathic dispensary was opened at Karnal. In the course of next fifty years, it was followed by a number of hospitals and dispensaries. By 1918, there were 2 hospitals in Karnal including one Zenana Mission Hospital, 1 city dispensary in Panipat and 11 District Board dispensaries besides 2 canal dispensaries (one open to the public) and one police hospital.² The rural masses, however, had to depend mainly on the services of indigenous practitioners who were readily available and charged less fee.

MEDICAL AND HEALTH SERVICES

The administration of medical relief required attention on several fronts. The health services had to be expanded to cope with the increasing number of hospitals and dispensaries and to supervise measures to check epidemics and to organise health education and various schemes connected with the promotion of public health.

The combined medical and health services are now looked after by the Chief Medical Officer assisted by Deputy Chief Medical Officer (Medical) and Deputy Chief Medical Officer (Health).³ The medical service is essentially a hospital organisation for rendering medical relief to the public. This is provided through a chain of institutions of both allopathic and indigenous systems of medicine. In 1969,⁴ there were 6 allopathic hospitals, 20 dis-

1. *Karnal District Gazetteer*, 1883-84, p. 270.

2. *Karnal District Gazetteer*, 1918, p. 207.

3. The departmental set-up was re-organized in July 1964, with a view to providing medical aid to the people in a better way. The two officers concerned with health and medical problems prior to the re-organisation of the Health Department were the District Medical Officer of Health and the Civil Surgeon, one each at the district headquarters. Rural dispensaries, rural health centres and primary health units were administered by the District Medical Officer of Health while the local body and other civil dispensaries and district and tahsil headquarters hospitals were under the charge of the Civil Surgeon.

4. After bifurcation of the Karnal district on January 23, 1973, the number of hospitals in the Karnal and Kurukshetra districts has been as follows on 31-12-1973 :—

Hospitals/Dispensaries	Number	
	Karnal district	Kurukshetra district
Allopathic Hospitals	3	4
Allopathic Dispensaries	13	10
T. B. Clinic	1	—
School Health Clinic	1	—
Primary Health Centres	9	6
Maternity and Child Welfare Centres	2	2
Family Planning Clinics	14	12
Ayurvedic Dispensaries	19	19
Unani Dispensaries	2	2

pensaries, 1 T.B. clinic, 1 school health clinic, 16 primary health centres, 4 maternity and child welfare centres, 32 family planning clinics, 25 Ayurvedic and 4 Unani dispensaries in the district. The details of these institutions are given in Table XLIV of Appendix. Only the more important of these are described here :

Civil Hospital, Karnal.—Known as the King Edward Memorial Hospital, it was built at a cost of Rs. 2.5 lakhs in 1912 from District Board and Municipal funds, private subscriptions and a grant of Rs. 10,000 from Government. Considering the standard of that time, it was a fine and well-designed building situated in a large compound. It had separate arrangements for treating female patients as well as infectious cases. It afforded accommodation for 114 inpatients including 10 rooms for paying patients and one for the Europeans. The hospital was provincialised in 1928 and since then it has been managed by the State Government.

This hospital, under the charge of a Chief Medical Officer, is the biggest in the district with accommodation for 200 beds. It is provided with an X-ray plant and laboratory facilities. There is a well equipped operation theatre where arrangements exist for the administration of anaesthesia. The hospital also provides referral and specialised services. It has a separate female section for gynaecology and obstetrics. There are nine departments, viz. Clinical Medicine, Clinical Surgery, Paediatrics, Gynaecology, Obstetrics, Eye and Ear Nose Throat, Radiology, Dental and Casualty, headed by qualified doctors. The Casualty Department provides round the clock service for emergency cases. The following table shows how the number of indoor and outdoor patients treated at this hospital increased during the period 1960 to 1969 :—

Year	Indoor attendance	Outdoor attendance
1960	47,262	1,10,290
1961	64,819	61,624
1962	66,669	1,87,481
1963	67,766	2,03,652
1964	82,293	2,06,243
1965	79,978	1,93,846
1966	70,390	2,06,758
1967	76,050	2,11,682
1968	72,926	1,97,435
1969	77,612	2,10,525

The hospital runs a course for Staff Nurses training. Besides, a Blood Bank, the Public Health Laboratory, the District Tuberculosis Clinic and the District Family Planning Bureau have been housed in the premises of the Civil Hospital. These are also described here briefly :

Blood Bank.—A Blood Bank exists in the Civil Hospital, Karnal. The blood transfusion work was started in 1948 with the help of the District Red Cross Society. Blood for emergency cases is also supplied to the Civil Hospitals at Kaithal and Panipat from this Blood Bank.

Public Health Laboratory.—Started in 1952 on a modest scale, the Public Health Laboratory is housed in a new double-storeyed building constructed at a cost of Rs. 2 lakhs in the premises of the Civil Hospital, Karnal. In 1960, a field epidemiological unit was attached to the laboratory. Besides conducting on-the-spot routine tests in various hospitals and dispensaries, the unit also conducted a hook-worm and goitre survey. The laboratory also prepared itself for assisting in national defence efforts and in 1963 registered a large number of voluntary blood donors who were issued donor cards. Their blood groups were tested and recorded so that blood could be collected without loss of time in the event of an emergency.

The laboratory is presently very well equipped with the assistance of the UNICEF. It functions through the departments of Clinical Pathology, Blood Transfusion, Clinical and Public Health Bacteriology, Serology and Biochemistry. It has been carrying on extensive research in Brucellosis and is now considered a premier Brucellosis Research Centre. The laboratory deals with such material as culture of stools in cholera cases, examination of rats for plague and examination of water used for drinking purposes. It prepares Glucose Saline for the use of the local Civil Hospital and for the whole of the district, if needed.

The laboratory is also well equipped for blood transfusion work. It acts as central laboratory for training technicians and doctors in this work and distributes equipment required for blood transfusion to all the hospitals in the State. Classes to train Basic Health Workers-cum-Vaccinators are also held.

District Tuberculosis Clinic.—Changing concepts in the treatment of tuberculosis have brought the clinic/domiciliary service to the forefront. Accordingly in 1954, a T.B. clinic with 18 beds was started at Karnal by the District Tuberculosis Association. It is located in the premises of Civil Hospital. Its bed strength was raised to 22 in 1966. It was provincialised

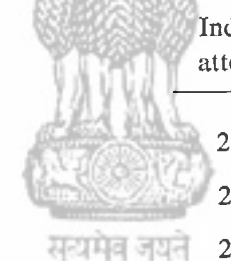
in April 1967, and put under the charge of an N.T.I. (National Tuberculosis Institute) trained Medical Officer. The clinic provides diagnostic and treatment



सत्यमेव जयते

Civil Hospital, Panipat.—Originally a Municipal hospital, it was provincialised in 1954 and since then it has been run by the State Government. Prior to the inauguration of the new building on December 23, 1969, on the Grand Trunk Road opposite the P.W.D. Rest House, the hospital was located near the General Post Office. The old building was converted into Maternity and Child Welfare Centre and an Urban Family Planning Centre was also being opened there.

The civil hospital is a 50-bedded referral hospital and offers all the usual facilities of a general hospital, viz. Medical, Surgical, Gynaecology, Midwifery, Laboratory, X-ray and Dental. Anti-rabic treatment is also available. The cases from the Primary Health Centres, Bapauli, Samalkha and Ahar covering a population of about three lakhs are referred by the respective Medical Officers. The hospital is headed by a Senior Medical Officer, who is assisted by three doctors in charge of different departments. The following figures show attendance of indoor and outdoor patients during 1968 to 1970 :—



Year	Indoor attendance	Outdoor attendance
1968	2,681	30,409
1969	2,563	30,484
1970	2,865	30,933

E.S.I. Hospital, Panipat.—The E. S. I. Dispensary which had been opened in 1962-63, was shifted to its new spacious and modern type building adjacent to the Civil Hospital, Panipat, in 1971 after having been converted into a full-fledged hospital. Though run by the State Government, the E.S.I. Corporation of India provides funds equal to 7/8th of the annual expenditure incurred on this hospital.

The hospital has a provision for 50 indoor patients (43 male patients and 7 female patients). The E.S.I. patients suffering from chest diseases from all over the State are treated here and 35 beds have specifically been reserved for such patients. The hospital offers all usual facilities of a general hospital with X-ray and laboratory. The patients requiring specialised treatment are, however, referred to the Medical College Hospital, Rohtak. This hospital is headed by a Medical Superintendent, who is assisted by five General Duty Medical Officers. The following figures show the attend-

ance of indoor and outdoor patients during 1971 to 1973 :—

Year	Indoor attendance	Outdoor attendance
1971	181	36,528
1972	595	43,990
1973	565	35,546

Referral¹ Hospital, Kurukshetra.—Started on October 1, 1965, this State-run hospital has been located at the first gate of the Kurukshetra University Campus. The hospital is headed by a Senior Medical Officer who is assisted by a Medical Officer and two Dental Surgeons. All the facilities of a general hospital like outpatient and indoor treatment, X-ray and laboratory facilities, gynaecology, obstetrics, dental and anti-rabic treatment are available. It has 50 beds for indoor patients. The number of outdoor and indoor patients, as shown below, attending this hospital for treatment since its inception, brings out its rapidly increasing popularity :

Year	Outdoor attendance	Indoor attendance
1965	96	5,542
1966	2,887	41,872
1967	6,654	33,254
1968	10,027	22,077
1969	10,380	24,744
1970	17,223	53,016

Shree Sanatan Dharam Mahabir Dal Free Eye, Maternity and Family Planning Hospital, Karnal.—The construction of this free hospital was started in September 1966 on a plot of land measuring 12,500 sq. yards. The total estimated cost of this hospital was about Rs. 10 lakhs. The hospital has been partly built and about Rs. 5 lakhs has been spent on

1. The epithet 'referral' in the name of this hospital does not attach any special significance. For all intents and purposes it is a civil hospital. In addition, however, it is a referral hospital like other three civil hospitals at Karnal, Panipat and Kaithal. All these hospitals also attend to the cases referred to them by the primary health centres and dispensaries falling in their area.

equipment and the construction of the outdoor department with office accommodation, two indoor wards, operation theatre, etc. The outdoor and indoor departments of the Eye Hospital started functioning on May 10, 1966 and the family planning and maternity wings in August 1969. In addition to diagnostic facilities for eye diseases, refractory work is done and eye glasses and medicines are given to poor patients free of cost. The poor patients who are operated upon are also provided free boarding and lodging. The Eye Hospital is getting popular year after year as the following figures of indoor and outdoor patients visiting the hospital indicate :—

Year	Number of patients	
	Indoor	Outdoor
1966-67	240	2,525
1967-68	250	3,110
1968-69	343	10,373
1969-70	407	12,500

The people attending the family planning clinic are given necessary guidance and contraceptives free of cost.

DISEASES COMMON TO THE DISTRICT

The common diseases that occur in the district are typhoid group of fevers, tuberculosis, dysentery and diarrhoea, trachoma and chest infections (other than tuberculosis). Cholera, plague and smallpox are the three notifiable diseases under the Epidemic Diseases Act, 1897.

Cholera.—It is not an endemic disease either in the State or in the district. Its occurrence in an epidemic form resulted from mass gatherings, like the Kumbh fairs at Hardwar (U.P.) from where the disease was carried into the State by returning pilgrims. The mass gatherings within the district on the occasion of the solar eclipse fair at Kurukshetra and the fairs at Phalgu, Pehowa and other places also accounted for the spread of the disease. Pilgrims coming from various endemic areas of the country to these fairs brought infection into the district. The number of such cases, however, has decreased considerably in recent years because of strict vigilance and other anti-cholera operations like medical inspection posts, mass inoculations in hospitals and sanitary measures on the occasion of such fairs.

With the development and expansion of public health activities relating to disinfection of water and insuring safe water-supply, pavement and

drainage of streets, removal of refuse and manure heaps, anti-fly and other general sanitation measures, the severity and incidence of cholera outbreaks have been markedly reduced and the number of deaths from cholera has remained very low since 1952 (Table XLV of Appendix).

Plague.—At one time, plague was one of the most feared of all the epidemics. Ever since its appearance in the Punjab in 1897, it persisted till 1937. It had raged in the Karnal district almost every year since 1902 and exacted a heavy toll of life during the period 1902 to 1911. After 1937, the district has remained free from the disease and no case has been reported. The factors determining its disappearance have been the spraying of houses with insecticides to kill rat fleas and systematic de-ratting measures.

Smallpox.—Of the three chief epidemic diseases, cholera and plague are not endemic in the State and the incidence of these two diseases depends largely on the chances of importation of infection and laxity of preventive measures to check them. Smallpox, however, has always been endemic in the State. Though the increased vaccination and related facilities and public awareness with regard to vaccination and re-vaccination have substantially reduced the incidence of its recurrence, yet its complete eradication is still a long way off. The disease is more common in the Kaithal and Panipat areas than in other areas of the district. Incidence of smallpox and the details of preventive measures taken in the district are given in Table XLVI of Appendix.

Many factors operate adversely. The cases are concealed by the villagers and not reported by the village officials. Many urban local bodies do not pay uniformly serious attention towards smallpox eradication work. New-born children are not vaccinated and grown-ups are not re-vaccinated. Above all, the vaccinating staff is generally insufficient and not always very effective.

Smallpox cases occur mostly during winter and the disease appears in epidemic form once in a span of 5 to 6 years. The National Smallpox Eradication Programme was launched by the Government of India in April 1962. Under this programme, mass campaign was carried out and the entire population of the district was vaccinated during 1962-63. This resulted in the suppressing of the epidemic from 1963 to 1965, but it spurted up to a fair number of cases in 1966 (cases : 310, deaths : 21), 1967 (cases : 423, deaths : 45), 1968 (cases : 48, deaths : 5), 1969 (cases : 51, deaths : 7)

and 1970 (cases : 16, death : 1). The people who could not get themselves vaccinated in time caught the infection.¹

Malaria.—This district, as already mentioned earlier, had been notorious for high incidence of malaria. It was because of this fact that the first serious attempt to study malaria problem in the country was made by establishing 'Col. Ross Field Experimental Station for Malaria' at Karnal in 1910. This institution was converted into 'Malaria Institute of India' and shifted to Delhi in 1938. Later on, from July 30, 1963, it came to be called 'National Institute of Communicable Diseases'.

The main contributing factor for the incidence of malaria in this district is the inundation during monsoon and the overflowing of rivers, streams and other water channels. This leaves behind big patches of water collections here and there, which prove very good breeding places for anopheles mosquitoes thus exposing the entire population of the district to the ravages of malaria. Water-logged conditions of soil in the vicinity of Western Jumna (Yamuna) Canal and its distributaries in addition to the old canal (Wazir Khan Mughal Canal) are also responsible for endemcity of malaria.

To eradicate this disease, which was by far a major public health menace from the point of view of sickness, vitality and mortality, the Malaria Unit, Karnal was established in 1953 under the National Malaria Control Programme. To start with, only the highly malarious areas of the district were taken up. The two tahsils of Thanesar and Kaithal were transferred to the Malaria Units, Ambala and Patiala in 1954 and 1957 respectively. This was done to make up a population of one million for each Malaria Unit established in the State.

In 1958, National Malaria Control Programme was converted into National Malaria Eradication Programme. All the areas, both urban and rural, previously not under Malaria Control, were surveyed and brought under its control. From that very year all the three tahsils, viz. Karnal, Panipat and Kaithal were allotted to Malaria Unit, Karnal, and these remained under its control up to the end of 1964. The programme consisted of two stages, i.e. D.D.T. spray and surveillance. Under the first stage, the district received two rounds of D.D.T. spray during

1. The World Health Organisation also assists in the National Smallpox Eradication Programme by providing medical personnel (short-term consultants or a Medical Officer for a longer period), equipment and supplies—principally freeze dried vaccine.

transmission season every year till 1961-62. The details of work done are shown in Table XLVII of Appendix. The second stage, the phase of eradication (*i.e.* surveillance) was also started side by side towards the end of 1960. The two stages overlapped during 1961 when the transmission of the disease was checked in the district and D.D.T. spray was withdrawn. This marked the completion of the first phase of eradication.

The second stage, the surveillance of residual foci of malaria infection, consisted of active surveillance and passive surveillance. Under active surveillance, the area of the district falling under Karnal Unit was divided into 100 sections, each section carrying a population of about 10,000 persons. The surveillance staff (door to door visitors for detection of fever cases and collection of blood smears) was recruited, trained and posted in sections. This insured a fortnightly domiciliary visit to each family and collection of blood smears of fever cases and administration of 4 amino-quinoline tablets to suppress the disease. If any patient was found positive to malaria, he was administered radical treatment for 5 days to clear his blood of malaria parasites.

Under passive surveillance, various hospitals, dispensaries and other medical institutions play important role as passive agencies and are supposed to prepare the blood slides of every fever case reported to them. This measure screens all the fever cases for malaria parasite.

The Karnal Unit entered into the consolidation phase of the eradication programme in 1962. Active and passive surveillance operations were intensified throughout the area. On the basis of the appraisal of the results of malaria eradication work carried out within the area of Karnal Unit, the whole of Karnal district comprising 15 blocks, entered into the maintenance phase. The entire population of the rural area and fifteen per cent population of the urban area (of Karnal, Panipat, Gharaunda, Nilu Kheri (Nilo Kheri), Pehowa, Thanesar, Ladwa, Radaur, Shahabad (Shahbad), Pundri and Kaithal towns) were covered under malaria vigilance activities during 1965 and 1966 respectively.

As a result of the National Malaria Eradication Programme, the incidence of the disease has been considerably reduced in recent years. However, a big set-back to this eradication programme occurred in 1968 when 3,155 positive malaria cases were detected. Accordingly necessary eradication and control measures were re-instituted to bring the situation under control. The number of malaria cases treated during 1950 to 1969

was as under :

Year	Malaria cases treated in hospitals/dispensaries
1950	68,654
1951	50,884
1952	67,178
1953	70,389
1954	50,795
1955	47,050
1956	35,910
1957	13,424
1958	..
1959	4,067
1960	2,434
1961	571
1962	60
1963	5
1964	4
1965	2
1966	12
1967	16
1968	3,155
1969	5,100



Tuberculosis.—Tuberculosis is a major public health problem. The National Sample Survey has revealed that 1.3 to 2.5 per cent of the population suffers from the disease and it is equally prevalent in the rural and urban areas. These figures, though a conservative estimate, indicate the magnitude of the problem. B.C.G. vaccination campaign was launched to

protect the susceptible population in the shortest period. The entire area of the district has been covered twice and tuberculine tested, and those found negative given B.C.G. vaccination. In 1963, 9,55,274 persons were tested. Of these, 4,67,399 were found negative and given B.C.G. vaccination. In the mass campaign infants under 1 year were excluded but later the benefit of the protective inoculation was extended to the new-born. B.C.G. vaccination operations have been completed in the Karnal and Kaithal tahsils. In villages with a population of less than 15,000, persons up to 20 years of age have been given direct B.C.G. In the towns, persons below 6 years of age have also been given direct B.C.G. While those above 6 years were given tuberculine test, only those found negative have been given B.C.G. The number of vaccinations given during 1967, 1968 and 1969 was 3,75,184, 2,88,225 and 3,63,784 respectively.

The National T.B. Control Programme has also been launched in the district since January 1968. The medical facilities against this disease have been arranged in all the primary health centres and various dispensaries under the supervision of the District T.B. Clinic.

Trachoma.—Trachoma is a common eye disease. The Trachoma Eradication Programme, which is also a centrally sponsored scheme, is in progress. This programme was launched in 1966 with a view to controlling the spread of this disease. Children below 10 years are given application with anti-biotic eye ointment twice a day for 5 days in a week extending over a period of 6 months.

Influenza.—The influenza cases continue occurring here and there. There was a countrywide epidemic of this disease in 1957 which gripped the Karnal district also. As many as 9,731 cases were reported while similar figures for the previous 2 years, *i.e.* 1955 and 1956 were 933 and 1,410 respectively. During 1969-70, only 571 cases were reported from the district.

Gastro-enteric diseases.—The most common infections are typhoid and enteric group of fevers, dysentery and diarrhoea, disease of 5 F's—flies, fingers, faeces, fomites and food. These diseases are well under control as a result of organized preventive measures like protection and disinfection of drinking water wells and general sanitation measures taken by the Public Health Staff at primary health centres and the supervisory staff at the district headquarters,

Leprosy control.—Local population is free from leprosy. However, in the last few years, leper beggars migrated to Karnal from other parts of the country. They set up mud-hut *basties* on the outskirts of Karnal and Panipat towns. They earn their livelihood through begging in the bazaars. They are thus a big health hazard. In order to provide medical treatment to these patients and to check the spread of leprosy a programme of leprosy eradication and control has been taken up by the Hind Kusht Niwaran Sangh, Haryana State Branch, Chandigarh. A branch of this Sangh was set up at Karnal in 1969 and its programme included the construction of a Leprosy Patients Colony with facilities for Medical treatment and Vocational Training Centre with the object of rehabilitating the leprosy patients into normal life and also to provide means of sustenance to them.

Called by the name of 'Indira Chakravarty Gram,'¹ an area of $3\frac{1}{2}$ acres outside the Karnal town was given on long lease by the Municipal Committee, Karnal, for setting up of the colony to provide accommodation to the families of leprosy patients. Funds for it were raised through a charity film stars show in March 1969 and Rs. 35,000 were earmarked for the Leprosy Patients Home. A sum of Rs. 38,000 was donated by the Municipal Committee and Rs. one lakh by the State Government. Construction work on the colony was started in February, 1970 and it was inaugurated by Shri Bansi Lal, the Chief Minister, in May 1970. The colony provides living accommodation with flush latrines and drinking water. Construction work on the Vocational Training Centre is in progress. Haryana Government had accepted the offer made by the Lott Carey Baptist Foreign Mission, New Delhi, for the setting up of a Leprosy Clinic at Karnal. The colony, which is the first of its kind in India will have 16 residential units. The Karnal Branch of the Kusht Niwaran Sangh plants to set up a poultry farm and a piggery to help leprosy patients earn for themselves.

VITAL STATISTICS

The satisfactory results achieved by the Health Department are reflected in reduced incidence of disease, lower mortality—both infant and adult—longer expectation of life and an all-round better health of the community. Table XLV of Appendix showing the number of deaths caused by different diseases from 1950 onwards and the following table showing birth and death

1. After the name of the wife of the Governor of Haryana, Shri B.N. Chakravarty.

rate and the infant mortality from 1948 onwards illustrates this position :—

Year	Birth rate per thousand of population	Death rate per thousand of population	Infant mortality (under 1 year of age) per thou- sand of live births
1948	33.90	17.50	135.66
1949	39.80	14.17	107.29
1950	35.88	16.60	132.19
1951	40.93	14.05	103.86
1952	44.54	16.40	117.98
1953	42.38	19.82	135.85
1954	46.40	14.42	107.77
1955	47.59	13.68	97.07
1956	45.66	16.50	102.98
1957	49.89	15.15	95.69
1958	48.91	17.28	115.38
1959	47.82	12.93	91.95
1960	49.31	15.42	91.21
1961	37.49	9.84	79.71
1962	35.65	10.00	80.03
1963	35.67	9.18	67.59
1964	34.68	9.11	64.31
1965	32.41	8.18	59.93
1966	33.98	8.71	55.93
1967	32.94	7.92	45.12
1968	30.65	7.45	49.64
1969	31.97	7.17	44.76
1970	29.70	7.10	42.60

These figures are very revealing. The birth rate continued increasing till 1960 (from 33.90 per thousand to 49.31). There was downward trend till 1964 and thereafter became almost constant at about 30 per thousand. The increase in the birth rate probably resulted from the process of urbanisation and better health facilities and the decline/consistency has been due to the spread of family planning education and economic stress. The death rate declined considerably in the sixties. The steady fall in infant mortality also coincided with the birth and death rate. The drop in death rate and infant mortality is attributable to health education and better public health and maternity services.

Diet and general standard of health.—The diet of the common man although rich in carbohydrates is deficient in proteins and to some extent in fats and vitamins. There is more of mal-nutrition than under-nutrition. People are by and large vegetarians and usually consume *chapatis* or rice with *dals*; a few take vegetables. Only a small section of them take body building protein-rich food articles (meat, eggs, fish and milk) and other protective foods (green leafy vegetables, and *salad*, fresh fruits, etc.) but they too do not seem to be regular in their food habits and rarely conscious about the balanced and nutritive diet. The large sized families, especially among the poor class, suffer both from under-nourishment and mal-nutrition. The family planning services have still to make an effective impact on family budgets and nutrition.

There is a general improvement in health noticeable in the post-Independence period due to launching of various public health programmes including supplementary milk/C.S.M.¹ feeding, applied nutrition and better medical care. The general standard of health of the inhabitants of the district is fair. The people are generally tall and healthy and possess robust physique.

PREVENTIVE MEASURES TO PROMOTE PUBLIC HEALTH

The modern conception of good health rightly lays greater emphasis on the prevention of disease. This necessitates various kinds of measures. The younger generation at school as well as the older members of the community must be given health education which is perhaps the most important activity for any effective preventive measure. The importance of good health habits formed in the earlier years cannot be over-emphasised. Likewise, family planning and maternity welfare require the greatest

1. C.S.M. is a corn, soyabean and milk mixture, now being widely promoted by the United States of America to alleviate the protein shortage in developing countries.

attention if the problem of over-population has to be satisfactorily dealt with. It is equally necessary to take suitable measures to prevent adulteration of food, to promote desirable knowledge and practice of nutritive foods, to make supply of safe drinking-water possible for even those living in rural areas and to take all other such steps as will improve environmental hygiene.

School health services.—Healthy children ensure a healthy nation. It was in this context that a School Health Clinic was established at Karnal during the Second Five-Year Plan (1956—61). This clinic, staffed with a School Health Medical Officer, an Eye Specialist, a Dentist and supporting para-medical staff, provided regular health care to the local school children. This programme was, however, reorganised in 1969. Now a District School Medical Officer looks after the school health programme in the district. He visits the schools and gives advice to the Headmasters/Headmistresses for appointment of part-time School Medical Officers and Pharmacists, proper sanitation (especially construction of latrines and urinals), provision of safe water-supply to children and arrangements for their midday meals. The Medical Officers of primary health centres also give physical check-up to certain children in local schools. Referral school health service is available in every civil hospital, civil dispensary primary health centre and rural dispensary.

Health education.—The Medical Officers in charge of the primary health centres/units and their staff carry out health education and propaganda. In fact, proper health education is the main pre-requisite for the success of all the health programmes and is integral responsibility of all the medical and para-medical personnel in the district. The District Family Planning Education Officer also utilises his staff to disseminate health education. This programme creates health consciousness among the younger and older members of the community.

Family planning.—The expectation of life in the Karnal district has risen to 53 years which is nearly double the pre-Independence figure. This has happened as a consequence of health education, prevention of disease and medical relief. The family planning programme was introduced in the district in 1957-58 with the opening of five family planning clinics at Karnal, Panipat, Kaithal, Ladwa and Shahabad (Shahbad). The family planning services are now rendered through the family planning clinics working independently or as wings of the existing institutions like civil hospitals, dispensaries, maternity and child welfare centres and primary health centres.

Their list may be seen in Table XLIV of Appendix. Vasectomy and I.U.C.D. (popularly known as Loop¹) camps are organized at all these centres/units and maternity and child welfare centres. The conventional contraceptives such as condoms, foam tablets, jelly, diaphragms, etc., are distributed through 177 contraceptive depots/centres spread over the district. Now some post offices have also been enrolled as depots for the sale of Nirodh².

The following data give an idea about the work done under the family planning programme :—

Year	Number of persons	
	operated upon for sterilization	fitted with I.U.C.D.
1965-66	403	11,428
1966-67	1,427	8,806
1967-68	1,691	8,920
1968-69	4,291	4,625
1969-70	2,992	5,803
1970-71	2,965	4,564

Efforts are afoot to make the people fully conscious of the need for family planning programme through intensive health education. Family planning seminars/camps under the supervision of the Medical Officer are organised in every block where vasectomy operations are performed and family planning activities are explained and highlighted.

Karnal is the only district in the whole of the country where seven villages have been made Family Planning Villages. The idea was to cover all the eligible couples residing in these villages with family planning programme. Efforts in this behalf were started in 1967 and the programme completed

1. Loop is intra-utrine contraceptive device that prevents the development of a foetus in the womb.

2. Nirodh (condom) is a rubber contraceptive for use by men.

by the end of 1969. The following details about these villages may seem interesting :—

Village (tahsil)	Eligible couples	Family planning coverage by			Achievements (Percentage)
		Sterilization	I.U.C.D.	Other methods	
Basara (Panipat)	48	24	1	23	100
Chakchandpur (Thanesar)	26	16	10	—	100
Hamidpur (Thanesar)	60	30	12	18	100
Jalkheri (Thanesar)	50	25	9	16	100
Bhalolpur (Thanesar)	50	30	10	10	100
Kumhar Majra (Thanesar)	40	18	10	12	100
Sonkara (Karnal)	435	83	202	55	78

The increasing popularity of family planning programme in the Karnal district is thus evident. The following data further support it :—

Year	Sterilization			I.U.C.D.			Conventional Conceptive Users		
	Targets		Achievements	Targets		Achievements	Targets		Achievement
	Number	Percentage		Number	Percentage		Number	Percentage	
1969-70	11,604	2,992	26	5,802	5,803	100	15,486	4,278	27
1970-71	6,840	2,965	43	6,586	4,564	70	18,012	7,364	40

Maternity and child health.—A considerable number of women used to die in childbirth; many more who survived suffered from lasting ill-health. The work for attending to maternity services was, therefore, taken in hand.

During recent years, considerable progress has been made in the expansion of maternal and child health services. These services are available at all the civil hospitals and primary health centres in the district. Besides, there is a maternity hospital at Radaur with proper arrangements for indoor patients. The District Red Cross Society is running 4 maternity and child health centres at Karnal, Panipat, Kaithal and Shahabad (Shahbad). There has also been a steady increase in the number of Nurse Dai

and Trained Dai centres. Domiciliary maternity services through midwives and trained Dais have been extended considerably. Midwifery training is imparted at maternity and child health centres and various primary health centres. The aim is to have a trained midwife in every village to conduct maternity cases.

Primary health centres.—In each of the fifteen blocks there is at least one primary health centre and in certain blocks there are more than one. The staff has to provide total health care services including preventive, curative and health promotion activities. In each primary health centre, there is at least one Medical Officer, one Pharmacist, one Lady Health Visitor and one Sanitary Inspector supported by other staff. There are 6 sub-health centres, three under maternity child health and three under family planning schemes, attached to each primary health centre (except the Primary Health Centre, Ballah, which has three sub-health centres under maternity child health scheme only) but the integrated health care in each sub-centre is of the same nature. Previously emphasis had been on the treatment in hospitals, but now these centres take care of many preventive and curative programmes. These include treatment of outdoor and indoor cases, maternity child health work, family planning work, environmental sanitation, nutrition, school health services, water-supply, immunization programmes, etc.

The primary health centres are UNICEF-aided and have been provided with UNICEF jeeps, refrigerators and other equipment including certain drugs and vitamins. UNICEF executes its Milk Feeding Programme through centres as shown in Table XLVIII of Appendix.¹

Prevention of adulteration in food-stuffs.—Every effort is being made to check adulteration in food-stuffs under the Prevention of Food Adulteration Act, 1954. The officers invested with the powers of Food Inspector are : Chief Medical Officer, Deputy Chief Medical Officer (Health), Deputy Chief Medical Officer (Medical), Government Food Inspector, Karnal, District Sanitary Inspectors, Panipat, Kaithal and Thanesar and all H.C.M.S. II Officers in the district. In urban areas under the local bodies, Chief Sanitary Inspectors of Municipal Committees, Karnal, Shahabad (Shahbad) and Thanesar also exercise certain powers under the Act. The work done about the prevention of adulteration in food-stuffs is detailed in Table XLIX of Appendix.

1. Further supplies of milk have been suspended in pursuance of the universal policy of UNICEF to withdraw from all feeding programmes.

Nutrition.—The primary health centres/units deal with oral nutrition, particularly in maternity and child welfare centres by organising Milk Feeding Programme, providing vitamin A and D capsules, iron and multi-vitamin tablets and B-complex tablets received by them from the UNICEF. They also help in arranging nutrients and medicines through Education Department and Red Cross Society, under School Health Services, to the needy school children. With the assistance of the Government of India and UNICEF, Applied Nutrition Programme is also being carried out in Panipat, Nilu Kheri (Nilo Kheri), Thanesar and Gula (Guhla) blocks. It aims at educating people in taking balanced and nutritive food from among the available food items.

Water-supply (urban).—Piped water-supply arrangements exist at Karnal, Kaithal, Shahabad (Shahbad), Thanesar, Panipat and Nilu Kheri (Nilo Kheri), but the systems need considerable extensions to cover these towns completely and to provide for adequate quantity of water. The supply of water is intermittent and in quantitative terms is 10—20 gallons against the requirement of 20—30 gallons per head per day.

A permanent arrangement has been made for supply of drinking water to meet the requirement during Solar Eclipse Fairs at Kurukshetra.

Water-supply (rural).—Considering the nature and availability of water, the Karnal district can be divided broadly into two zones. The first zone comprising the south-western area of Kaithal tahsil experiences difficulty on account of brackish water but the problem is not acute. People usually construct wells near ponds and canals where the water is sweet on account of percolation of surface water. In this area only 3 villages, viz. Deoban, Kheri Sharafali and Kheri Sheru, have been covered for the provision of potable water-supply under the National Water-Supply and Sanitation Programme. In the second zone comprising the rest of the district, the ground water is sweet, and tubewells, percolation wells and hand-pumps are the common sources of water-supply.

Sewerage and sanitation (urban and rural).—The underground sewerage exists in only three towns, viz. Karnal, Kaithal and Panipat. The coverage is partial as only a portion of the trunk mains has been laid. The effluents are used for broad irrigation, without any pretreatment.

Environmental hygiene.—In the recent years, there has been a lot of improvement in the environmental hygiene. With the coming up of development blocks, there has been an all-round activity for the improvement of

villages in regard to link roads, pavement of streets, drainage, and water-supply by providing ideal wells, hand-pumps and tubewells. The cattle excreta is deposited in the dung pits located outside the villages. The sullage water is disposed of either in the ponds or drained off in the open fields. Food, sanitation, school health services and measures to control communicable diseases are some of the other factors which have contributed towards the improvement of environmental hygiene. But on the whole the position cannot be called really satisfactory and there remains much to be done. It is a bit better in the urban areas. The sullage water is disposed of in the fields and the cattle and human excreta is deposited in the pits away from the towns where it is converted into compost and sold to the agriculturists. These arrangements are looked after by the municipalities under the supervision of the Municipal Medical Officers who are assisted by the sanitary staff.

Flood relief.—Before the floods are expected, the public health staff gets into harness. A number of teams, each headed by a Medical Officer, are formed at each civil hospital, civil dispensary, rural dispensary and primary health centre. They are supplied with adequate medicines and other equipment. The areas for the operation of each team are earmarked beforehand and this enables them to get into action quickly whenever their assistance is needed. Temporary dispensaries are established. Drinking-water wells are repeatedly disinfected and the affected localities are sprayed with insecticides to prevent breeding of mosquitoes and flies and thus to check malaria. Funds are also provided by the Government for the purchase of medicines and other equipment which are utilised for flood relief work as and when required. In addition, the District Red Cross Society distributes blankets, quilts and other items of clothing, skim milk, multi-vitamin tablets and other items of necessity.

UNICEF work and other preventive programme/work.—UNICEF is aiding in many ways. In addition to providing vehicles for various health programmes and also to the primary health centres, it supplies to the latter medicines and other equipment including a microscope and a refrigerator. To qualify for such an assistance, a primary health centre must fulfil certain conditions, *e.g.* the staff must consist of at least one Medical Officer, one Pharmacist, one Lady Health Visitor and one Sanitary Inspector. The programmes being aided by UNICEF include: Malaria Programme, Trachoma Programme, Nutrition Programme, School Health Clinic Programme, Milk Distribution Programme, Dais Programme, and B.C.G. Programme.

GENERAL

The following table gives an idea about the expansion of medical and public health services instituted in the Karnal district after the Independence :—

	1951	1961	1970
1. No. of hospitals and dispensaries	43	48	46
2. No. of beds	431	437	650
3. No. of indoor patients treated	11,259	13,687	20,167
4. No. of outdoor patients treated	4,27,273	4,26,274	5,23,083
5. Total income from various sources to hospitals and dispensaries	Rs. 3,85,976	Rs. 8,82,545	Rs. 31,01,447
6. Total expenditure on dispensaries and hospitals (excluding medicines)	Rs. 3,82,056	Rs. 7,06,086	Rs. 27,06,764
7. Expenditure on medicines	Rs. 51,928	Rs. 1,72,570	Rs. 4,94,683
8. No. of Ayurvedic dispensaries	Nil	20	38
9. No. of medical personnel including Doctors, Nurses, Midwives, Dais, Orderlies, Technicians, Dispensers and Class IV employees	..	237	492

Although not much progress has been made toward the opening of new medical institutions, there has been an attempt to strengthen and add more facilities in the existing ones. There were 43 hospitals and dispensaries in 1951 which increased to only 46 by 1970, but the number of beds increased from 431 in 1951 to 437 in 1961 and 650 in 1970. The figures relating to the number of indoor and outdoor patients which were treated at these institutions indicate that unlike in the past people are availing of the medical facilities in larger numbers. Likewise, the expenditure incurred on these institutions and on the medicines, has increased considerably. The opening of the Ayurvedic Dispensaries show that the Government is keen to give recognition to this indigenous system of medicine which particularly suits the needs of the rural people. The number of personnel in medical and public health services has also increased from 237 in 1961 to 492 in 1970.

If, however, the position is viewed relatively with regard to the facilities available in the field of medical and public health services in other districts of the State, the Karnal district did not enjoy a favourable position. This district in 1970 possessed 15 per cent of the total institutions in the State thus occupying fourth position although it was the second largest district in area and population. Similarly, the area served per institution was 173.13 square kilometre claiming third position among other districts. The population served per institution was 40,916 which was the second largest in the State. The district claimed 11 per cent of the total beds in the State and thus the population served per bed was also the second highest in the State.

Despite the fact that there is great scope for the provision of medical facilities, the medical and public health services have improved particularly during the last decade. To achieve better coordination in the agencies of medical relief and prevention of diseases, the medical and health services have been integrated. Infectious and communicable diseases have either been eradicated or brought under control. The birth rate has shown appreciable decline, particularly during the last few years. The infant and maternal mortality as well as death rate in general have gone down and consequently life expectancy has gone up. Adequate family planning measures are being taken to curb the rising trend in population. The standard of health and nutrition has also improved.

सत्यमेव जयते

Chapter XVII

OTHER SOCIAL SERVICES

One of the main objectives of a welfare State is to bring about social regeneration by raising the status and standard of economically backward or socially depressed communities. It is a type of remedial therapy.

Labour is the back-bone of society and therefore an all-out effort is being made to see that the interests of workers are properly safeguarded and employers do not exploit them. Machinery has been set up to settle labour disputes and to ensure proper compensation in case of physical damage. Collective bargaining for better wages and work facilities through accredited unions has been given legal recognition. Their future is guaranteed through employees' insurance and subsidised loans are allowed for industrial housing. Labour laws have become a highly protective umbrella for the working classes.

The State has also taken upon itself the task of uplifting the Scheduled Castes and backward classes. They are given loans to purchase land or build houses. They are no longer at the mercy of money-lenders. These loans go a long way in bringing about their economic rehabilitation. Stipends are given so that their children may enjoy the full benefit of educational facilities. They are given preference in industrial training. Untouchability which was a cancer in the social set-up has been legally abolished.

The Orphanage at Madhuban takes good care of children who lose their parental fold at an early age. They are brought up and are imparted education so that they may take their due place in society.

Steps are also taken to propagate prohibition because it is increasingly recognised that major part of crime is committed under the influence of liquor. These ameliorative measures take time in percolating to the masses and showing perceptible effect but certainly have a big impact in forming a solid base for future betterment.

LABOUR WELFARE

Prior to Independence, there was no regular Government organisation to look after the welfare of industrial workers and to settle industrial disputes and other connected labour problems. The Labour Depart-

ment in the State (Punjab) was established in 1949. The Labour Officer, Rohtak, and the Conciliation Officer, Bhiwani, represented the department for the Karnal district. After the formation of Haryana, these two offices were combined and a Labour Officer-cum-Conciliation Officer was posted at Karnal. His area of jurisdiction covered the Ambala and Jind districts also. As a result of subsequent changes in the jurisdiction of the Labour Officers-cum-Conciliation Officers in the State in December 1967, the jurisdiction of the Labour Officer-cum-Conciliation Officer, Karnal, was limited to the Karnal district (except the Panipat tahsil) and the Jind district. The Panipat tahsil which had been included in the jurisdiction of the Labour Officer-cum-Conciliation Officer, Sonapat, was included in the jurisdiction of the Labour Officer-cum-Conciliation Officer, Karnal, on September 16, 1968.

The Labour Officer-cum-Conciliation Officer, Karnal is assisted by the Labour Inspectors, Panipat and Karnal. As Conciliation Officer, he initiates conciliation proceedings for the settlement of industrial disputes as provided under the Industrial Disputes Act, 1947 and tries to settle them by mediation and by joint discussion. If he fails to settle the dispute, he submits his report to Government and after scrutiny the demands are either rejected or referred to the Labour Court/Industrial Tribunal by Government.¹

Labour Legislation.—Labour legislation is necessary to tackle economic and social problems of the labour as civil laws in general do not particularly deal with these problems. Labour laws are motivated by a humanitarian approach as propounded by the International Labour Organisation and are based on the principles of social justice. Labour, under the Constitution of India, is a concurrent subject and as such both the Central and the State Legislatures are empowered to make laws. Accordingly, the State Government has also enacted certain labour legislation to suit the local needs. The more important labour laws in force and their main provisions are detailed in Table L of Appendix. However, the Factories Act, 1948, is the most important of all the labour legislation. It is administered by the Inspector of Factories, Panipat, under the guidance of the Chief Inspector of Factories, Haryana. The Labour Officer-cum-Conciliation Officer, Karnal, and the Labour Inspectors, Karnal and Panipat also act as Inspectors of Factories. The Deputy Chief Medical Officer (Health) functions as Additional Inspector of Factories for enforcing the health provisions contained in the Factories Act.

1. There is a National Tribunal also to which reference is made by the Central Government to cover such cases as are of national importance or those in which establishments in more than one State may be affected.

Industrial Relations.—The relations between the employees and the employers are governed by the Industrial Disputes Act, 1947. As already stated, the Labour Officer-cum-Conciliation Officer, Karnal, is responsible for enforcing it. His efforts are directed towards fostering good relations between the management and the workers by removing, as far as possible, the causes of friction and by timely redress of the grievances of the parties. Emphasis is laid on settlement of disputes through direct negotiations across the table or voluntary arbitration rather than through compulsory adjudication.

Though the functions of the Conciliation Officer are advisory and he has no direct power to make or vary awards or agreements, he has been successful in bringing about a large number of agreements between the parties. During the period November, 1, 1966 to March 31, 1970, 333 disputes were handled by the Conciliation Officer in the district. Of these, 124 were settled through his intervention, 6 were referred to arbitration, 40 to adjudication and 98 were either withdrawn by the unions or rejected/ filed by Government.

Works Committees.—To promote good relations between the employers and the workmen, there is a provision in the Industrial Disputes Act, 1947, for the setting up of works committees in the industrial establishment employing 100 or more workmen. Such committees consisting of representatives of the employers and workmen engaged in the establishments exist in Swastika Woolen Mills, Panipat and Municipal Committee, Karnal.

Strikes.—In spite of measures to resolve difficulties and harmonize relations, strikes do occur and result in loss. During the period November 1, 1966 to March 31, 1970, the workers went on strike in two different establishments. In all, 188 workers were involved in these strikes and 2,664 man-days were lost. The details may be seen in Table LII of Appendix.

Trade Unions.—Ever since the attainment of Independence, the trade union movement in the district has gained momentum which is reflected in the steady increase in the number of registered trade unions under the Indian Trade Unions Act, 1926. Of the 55 registered trade unions which have been detailed in Table LI of Appendix, 9 may be regarded as more important. Their membership varies from 200

to about 700. These are as follows :—

Name of the trade union	Membership	Affiliation
1. Karnal Mechanical and General Labour Union, Karnal	670	Bharatiya Mazdoor Sangh
2. Textile Mazdoor Sangh, Panipat	670	Bharatiya Mazdoor Sangh
3. Panipat Rickshaw Pullers and Workers Union, Panipat	478	Independent
4. M.D.R.I. Employees and Workers Union, Karnal	327	Indian National Trade Union Congress
5. Khadi Karamchari Sangh, Panipat	320	Bharatiya Mazdoor Sangh
6. Government of India Press Workmen Union, Nilu Khari	205	Indian National Trade Union Congress
7. Municipal Karamchari Union, Karnal	200	Bharatiya Mazdoor Sangh
8. Adarsh Union Municipal Karamchari, Panipat	200	Bharatiya Mazdoor Sangh
9. Sugar Mills Mazdoor Sangh, Panipat	200	Independent

It is evident from the above that most of the trade unions are affiliated to Bharatiya Mazdoor Sangh particularly those with comparatively larger membership.

Subsidized Industrial Housing Scheme.—Realising the importance of providing accommodation to the industrial workers at a rental within their means, the Government of India initiated the Subsidized Industrial Housing Scheme in September 1952. Under the scheme, 40 two-roomed houses with modern amenities were constructed at Panipat. These houses have been rented out to the industrial workers at Rs. 16 each per month.

Employees' Provident Funds Scheme.—The wages of industrial workers are not sufficient to enable them to save adequately for their old age. When old age or illness renders them unfit for work, they are forced to lead a life of abject poverty and dependence. In the event of a worker's premature

death, his dependents are left destitute. The Employees' Provident Funds Scheme framed by the Government of India under the Employees' Provident Funds Act, 1952, was designed to remedy this situation.

Starting with six major industries, the Act now covers 124 industries and classes of establishments. The Act applies to such factories and establishments as have 3 years of existence and employ 50 or more persons or have 5 years of existence and employ 20 or more persons. In the Karnal district, 71 factories/establishments were covered by March 31, 1967 and out of 3,183 workers, 2,581 contributed to the scheme. By March 31, 1970, the number of factories/establishments covered rose to 88, and 4,885 workers out of 6,175 subscribed to the scheme.

Provident fund contribution is deducted at the rate of 6½ per cent from the monthly emoluments of the subscribers and an equal amount is contributed by the employers. The rate of contribution has since been enhanced to 8 per cent in certain industries/establishments employing 50 or more persons. The entire amount is deposited with the State Bank of India in Employees' Provident Funds Account. The administrative charges at a fixed rate are contributed additionally by the employers. The fund vests in a Central Board of Trustees having nominees of Central Government, State Government and representatives of employers and employees. The Central Provident Fund Commissioner is the Chief Executive Officer. The Regional Provident Fund Commissioner, Chandigarh is responsible for the implementation of the scheme in Punjab, Haryana and the Union Territories of Chandigarh and Himachal Pradesh¹.

The subscribers can have advance from the fund for payment of premia on their life insurance policies, purchase of a dwelling site or house, construction of a house, purchase of shares of consumer co-operative societies, meeting expenses in case of serious illness, etc. A death relief fund ensuring a minimum assistance of Rs. 750 to nominees/ heirs of the deceased subscribers was set up in 1964. A non-refundable advance is also granted in case of individual retrenchment in order to mitigate the immediate hardship.

A member is allowed to withdraw the full amount standing to his credit in the fund under such circumstances as on completing 15 years of membership, on attaining the age of 55 years, after retirement from service, retirement on account of permanent and total incapacity for work, migration from India for permanent settlement abroad and termination of service in the case of mass retrenchment.

1. Himachal Pradesh attained statehood on January 26, 1971.

Employees' State Insurance Scheme.—It is designed to provide security to the industrial workers against sickness, maternity and employment injury in the form of cash benefits. Wherever applicable, the scheme is compulsory. The workers drawing rupees five hundred¹ or less per mensem working in the factories employing 20 or more persons and using power in the manufacturing process, are covered under the Employees' State Insurance Act, 1948. This scheme is not applicable to the mines covered by the Mines Act, 1952, a railway running shed and the seasonal factories as defined in the Act. The following contribution is made by the employers and the employees :—

- (1) Till the enforcement of the scheme, an employer is to pay a special contribution at the rate of 0.75 per cent of the total wage bill. From the day the benefit provision of the Act is extended to any station, the employer's special contribution is payable at the rate of 4 per cent of the total wage bill.
- (2) An employee is to contribute about 2.3 per cent of his wages from the day the scheme is extended to that area.

The scheme functions under the administrative control of the Director General, Employees' State Insurance Corporation, New Delhi. In Haryana State, this scheme is executed through the Regional Director, Employees' State Insurance Corporation, Chandigarh, who inspects factories, collects contributions and arranges payment of cash benefits.

The provision of medical benefit is the statutory responsibility of the State Government and facilities are to be given according to the standards laid down by the Employees' State Insurance Corporation. Most of the expenditure on medical care is contributed by the Employees' State Insurance Corporation and only 1/8 of the total expenditure is borne by the State Government. The expenditure on other cash benefits is to be met entirely out of the Employees' State Insurance Fund and is arranged by the Regional Director.

To begin with, the scheme was introduced in Panipat on September 16, 1962 and an Employees' State Insurance Dispensary² established for the benefit of the workers. By March 1970, 2,750 beneficiaries were covered under the scheme. The scheme has not so far been extended to any other area of the district.

1. The previous limit of rupees four hundred was raised by the Employees' State Insurance (Amendment) Act, 1966, and was enforced on January 28, 1968.

4. The E.S.I. Dispensary was shifted to its new spacious and modern type building adjacent to the Civil Hospital, Panipat, in 1971 after having been converted into a full-fledged hospital. For details, see Chapter on 'Medical and Public Health Services'.

SOCIAL WELFARE

The social welfare institutions functioning in the district are detailed below :

State Orphanage (Haryana Rajya Bal Bhawan), Madhuban.—The State Orphanage, also called Haryana Rajya Bal Bhawan, is situated on the Grand Trunk Road six miles away from Karnal towards Delhi. This institution came into existence in December 1956 under the direct control of the State Orphanage Advisory Board. The Chief Minister is its Chairman and the Commissioner, Ambala Division, is the Vice-Chairman. The institution is meant for nursing, bringing up, educating and giving vocational training in the trades of carpentry, tailoring, leather goods making, foundry and printing, to about 200 orphans and destitute children between the age group 7—17. Such children are admitted without any distinction of caste, creed or colour on the recommendations of the Deputy Commissioners. The inmates are also taught music (both vocal and instrumental) and regular examinations are held by the Pracheen Kala Kendra, Chandigarh for the award of certificates/diplomas and degrees. A Government high school and a dispensary are run in the premises of the Bal Bhawan by the Education and the Health Departments respectively for the benefit of the inmates and the people of the area. Besides public donations, the institution receives financial assistance from the Social Welfare and the Industries Departments.

State After-Care Home, Madhuban.—Established on March 1, 1958, the institution is located at a distance of about six miles from Karnal on the Grand Trunk Road towards Delhi. It can accommodate 100 persons and aims at providing after-care services to the discharges of other non-correctional institutions such as orphanages, widow homes, infirmaries, etc., and to those who stand in need of such services. It aims at helping them to become useful members of society by preventing them from adopting anti-social ways.

The home provides free boarding and lodging. It also provides free medical, recreational, educational and technical training facilities to its beneficiaries. The inmates get education up to matric in Government High School, Madhuban. They are given training in the making of leather and canvas goods, i. e. shoe-making, school bags, conductor bags, holdalls, ground sheets, kit bags, etc. The inmates are also sponsored for higher education in colleges and technical training in industrial schools/training institutes/polytechnic. After completion of their education and training,

the inmates are rehabilitated through employment exchanges or personal sources.

Welfare Extension Projects, Nilu Kheri (Nilo Kheri), Karnal and Pundri.—The Punjab State Social Welfare Advisory Board started its welfare extension projects at Nilu Kheri, Karnal and Pundri blocks in 1952, 1954 and 1959 respectively. On the formation of Haryana, these projects came under the control of Haryana State Social Welfare Advisory Board. These projects aimed at promoting the welfare of women and children in rural areas. The programme included craft training and maternity care. The welfare centres also provided referral services for children in need of specific care and medicines for needy patients. Adult education and *balwadis* for children in the age-group 3—6 years who were also served with a midday meal, had been provided.

The Karnal Project comprised seven centres, *viz.* Baldni, Bara Gaon, Darar, Ghiyar, Kunjpura, Indri and Ranwar, and three sub-centres at Ganjo Gadhi, Uchana and Kurali (tahsil Karnal), and the Pundri Project comprised eight centres, *viz.* Barna, Fateh Pur, Habri, Jajanpur, Kaul, Papnawah, Pharal and Sanch (tahsil Kaithal). There was a Demonstration Project for Integral Services for Children in Nilu Kheri (Nilo Kheri) Block which continued till November 1967, when it was converted into a Family and Child Welfare Project. In 1968, it was declared to be the best project in the country. Its Grih Kalyan Kendra is located at Nilu Kheri (Nilo Kheri) and Balvikas Kendras are at Tirawari (Taraori), Butana, Nilu Kheri (Nilo Kheri), Nigdhu, Kirmach and Sultanpur (tahsil Karnal). The Welfare Extension Projects functioning at Karnal and Pundri were also converted, in January 1969, into Family and Child Welfare Projects under the Family and Child Welfare Scheme designed to consolidate and push ahead the gains of earlier welfare activities. This new scheme aims at providing integrated social services to children in villages particularly in the pre-school group, basic training to women and young girls in home craft, mother craft, health education, nutrition, child care and essential health and maternity services for women; promoting educational, recreational and cultural activities for women and children; and assisting women in villages to obtain supplementary work and engage in activities for their economic betterment. The Family and Child Welfare Project, Karnal, comprises one Grih Kalyan Kendra at Kunjpura and six Balvikas Kendras at Kunjpura, Indri, Uncha Siwana, Bara Gaon, Samora and Ghiyar (tahsil Karnal). The Pundri Project¹ comprises one Grih Kalyan Kendra at Fateh Pur and six

1. In the Kurukshetra district since January 1973.

Balvikas Kendras at Kaul, Fateh Pur, Pharal, Jajanpur, Papnawah (tahsil Kaithal) and Bhuna (tahsil Gula).

A functional committee notified by the State Government manages and supervises the work of Family and Child Welfare Projects. UNICEF and various departments of Government such as Development, Health, Public Relations and Education, act as the co-ordinating agencies.

ADVANCEMENT OF BACKWARD CLASSES

The Scheduled Castes, Vimukat Jatis and Other Backward Classes¹ residing in the district are as under :

Scheduled Castes : Balmiki, Chura or Bhangi, Batwal, Bauria or Bawaria, Bazigar, Bhedkut or Manesh, Chamar, Jatia, Rehgar, Raigarh, Ravidasia or Ravidasi, Darain, Dhanak, Dumna, Mahasha or Doom, Kabirpanthi or Julaha, Khatik, Kori or Koli, Mazhabi, Megh, Nat, Od, Sansi, Sapela, Sarera, Sikligarh

Vimukat Jatis : Aharia, Bhedkut, Kuchband, Tagu Brahman

Other Backward Classes : Dhobi, Jhangra Brahman, Jogi Nath, Kahar, Jhinwar or Dhinwar, Kamboj, Kumhar, Labana, Lohar, Nai

These people are scattered all over the district but the main concentration of Vimukat Jatis is at Thehbari² (tahsil Kaithal), Bir Badalwa and Bir Dhandari (tahsil Karnal).

The different professions adopted by these classes include agricultural labour, sweeping and scavenging, leather tanning, shoemaking, *chhaj*, *sirki* and rope making, pig and sheep rearing, snake charming, hair cutting, iron-smithery, washing, dyeing, etc. Generally, they live in small thatched huts on the outskirts of the villages. The members of the Vimukat

1. Scheduled Castes have been defined in Article 341 of the Constitution of India. Vimukat Jatis connote such a tribe, gang, or class of persons or any part of a tribe, gang, or class of persons which were deemed to be Criminal Tribes under the Criminal Tribes Act VI of 1924. Other Backward Classes include classes other than Scheduled Castes and Scheduled Tribes, recognised as such by the State Government on social and/or economic basis. Scheduled Castes professing a religion other than Hinduism are deemed to be Other Backward Classes.

2. Consequent upon the bifurcation of the Karnal district on January 23, 1973, village Thehbari has been transferred to the Jind tahsil of the Jind district.

Jatis are nomads who set up their temporary dwellings here and there as they shift from place to place.

The 1961 Census recorded 2,66,517 persons (1,42,370 males and 1,24,147 females) belonging to the Scheduled Castes forming 17.9 per cent of the total population. Of this, 7.1 per cent lived in towns. Among the Scheduled Castes enumerated, Chamars claimed the highest number (1,17,547), followed by Balmikis (78,660), Bazigars (13,027) and Mazhabis (11,642).

The Department of Welfare of Scheduled Castes and Backward Classes has adopted certain measures for the benefit of these classes in pursuance of the Directive Principles embodied in the Constitution of India.

Removal of untouchability.—Article 17 of the Constitution of India abolishes untouchability and forbids its practice in any form. The practice of untouchability has also been declared an offence under the Untouchability (Offences) Act, 1955. Despite these constitutional and legal guarantees, it is extant in one form or another especially in the rural areas. To eradicate untouchability, a special programme is carried on through community centres known as *samskar kendras*. These are started at places where there are large concentrations of the members of the Scheduled Castes and Other Backward Classes. These centres are open to all classes without any distinction. Besides the 3 R's (reading, writing and arithmetic), women are taught cooking, first-aid, home nursing, care of the baby, mending of clothes and some craft by a Lady Social Worker; and the children are trained in cleanliness, good conduct and right habits in addition to playing games. The Male Social Worker attached to the centre holds adult literacy classes, teaches cottage industries, organises sports, games and cultural programmes besides propagating against untouchability.

Seven community centres are functioning at Asandh and Dhus (Kaithal tahsil)¹, Jundla, Shamgarh and Samana (Karnal tahsil), Israna (Panipat tahsil) and Radaur (Thanesar tahsil)². For the construction of a community centre building, a sum of Rs. 2,000 is paid as subsidy by the Government and an equivalent amount is contributed by the respective *panchayats* which also provide a free site for the building. The centre is maintained in the village as long as necessary. In each centre the staff consists of one Male and one Lady Social Worker and one Lady Attendant preferably a trained *dai*.

1. In the Kurukshetra district since January 1973.

2. *Ibid*.

Encouragement for education.—The persons belonging to these classes are, by and large, illiterate. The special measures taken by the Government to spread education among them have been described in the Chapter on 'Education and Culture'.

Subsidy for construction of new houses.—In order to provide shelter to the homeless members of Scheduled Castes and Vimukhat Jatis, subsidies are granted for the construction of new houses. A subsidy of Rs. 900 for the construction of a house is given to a person who has no house of his own.¹ The proprietary rights of the house remain vested in the Government for 20 years after which the house becomes the property of the beneficiary. The latter, of course, has free use of the house during this period. During the period 1959-60 to 1969-70, a sum of Rs. 3,32,100 was disbursed under this scheme to 404 beneficiaries. Of these, 372 persons have constructed their houses.

Subsidy for house sites.—Overcrowding of houses in Harijan *bastis* in the rural area poses a serious problem. Although the Punjab Village Common Lands (Regulation) Act, 1961, has conferred upon Harijans the proprietary rights over the sites under their houses, yet the problem remains unsolved. A subsidy of Rs. 200 is granted to each deserving and needy member of the Scheduled Castes for the purchase of a new house site to relieve congestion in the *bastis*. The scheme was introduced during 1958-59 and up to March 1967, 154 persons benefited from it and received Rs. 30,800 as subsidy. The scheme was withdrawn by the Government of India on April 1, 1967.

Drinking-water amenities.—Grants are given to Harijans in rural as well as in urban areas for the provision of drinking-water facilities. The wells and hand-pumps constructed as such are open to the general public also. A sum of Rs. 1,27,250 has been granted during 1956-57 to 1969-70 for the following projects :—

Sinking of new wells	..	81
Fixation of hand-pumps	..	92
Repair of old wells	..	153
Total :	..	326

1. A house consisting of a room, verandah, kitchen and courtyard on a total area of 125 or 150 square yards, is constructed. The unskilled labour and site are provided by the beneficiary himself,

Facilities for industrial training.—To improve the economic condition of the members of the Scheduled Castes and Vimukat Jatis, their youth is trained as skilled workers by giving them training on apprenticeship basis in various trades in different institutions. Twenty per cent of the seats are reserved for the Scheduled Castes and Vimukat Jatis and two per cent for Other Backward Classes. During the course of training, which varies from one year to two years, a monthly stipend of Rs. 45 is granted to a candidate belonging to a Scheduled Caste or from the Vimukat Jatis. No stipend, under this scheme, is admissible to a candidate from Other Backward Classes.

Grant of interest-free loan.—For lack of finance, members of the Scheduled Castes and Other Backward Classes find it difficult to establish themselves in the profession of law, medicine, engineering and architecture. They also need money for establishing or expanding an industry, business or trade. They are, therefore, helped with loans, free of interest, under the Punjab Backward Classes (Grant of Loans) Act, 1957. These loans are recovered in 20 half-yearly instalments and the first recovery starts after the lapse of four years from the date of withdrawal of the loan. The maximum amount which is granted to a borrower is Rs. 2,000.

The scheme was introduced in 1958-59 and up to March 31, 1970, a sum of Rs. 1,75,455 was advanced to 287 persons from this district.

Subsidy/loan for purchase of agricultural lands.—Members of Scheduled Castes and Vimukat Jatis generally depend on land for their livelihood but most of them have no land of their own. To help the deserving landless members of these communities to acquire land, a subsidy of Rs. 2,000 was granted to a member who in turn had to contribute the remaining amount from his own resources to acquire an area of not less than 5 acres, each acre being of the minimum value of Rs. 900. In this way 234 persons had been settled by March 1969. A person so settled was given a subsidy of Rs. 500 for constructing a house/well on the land purchased. Subsidy to meet the expenses on stamp duty for registration of land was also provided. The following amounts were disbursed as subsidy :—

Scheme	Period	Amount disbursed as subsidy	Number of bene- ficiaries
1	2	3	4
Purchase of Agricultural Land	1956-57 to 1968-69	(Rs.) 4,68,000	234

1	2	3	4
		(Rs.)	
Subsidy for houses/wells under Land Scheme	1956-57 to 1968-69	1,17,000	234
Stamp Duty	1956-57 to 1968-69	22,840	74

The subsidy oriented 'land purchase scheme' has been remodelled into a loan scheme from 1969-70. Under the re-oriented pattern, a loan of Rs. 4,500 is granted to a beneficiary for the purchase of 3 acres of land. The loan is paid at three per cent interest and is recoverable in 20 half-yearly instalments commencing after four years of the date of disbursement. A subsidy of Rs. 360 is paid to the loanee (after the land has been bought) for the purchase of agricultural implements/inputs. Besides, a person so settled is given a subsidy of Rs. 500 for the construction of a house/well if one does not exist already. However, this subsidy is not restricted to the person to whom loan is given for the purchase of land but is open also to others who have their own land and have no house/well thereon. A loan of Rs. 67,500 was disbursed to 15 persons who were also given subsidy for the purchase of agricultural implements amounting to Rs. 5,400 during 1969-70. The subsidy for houses/wells amounting to Rs. 17,000 was given to 34 persons during 1969-70.

Agricultural land leases.—The Muslims belonging to the criminal tribes who had been settled in Agriculture Settlement, Birthbari in the Kaithal tahsil, migrated to Pakistan in 1947. The cultivable land comprising 660 acres at this settlement is now leased out on yearly *batai* tenures to the farmers belonging to Vimukat Jatis.

Legal assistance.—To protect the members of the Scheduled Castes and Vimukat Jatis against the tyranny of landlords or other exploiting classes, legal assistance to defend themselves is provided in cases involving ejectment from land, etc. The implementation of this scheme is under the charge of the Deputy Commissioner. An assistance of Rs. 2,180 was granted in 40 cases up to 1969-70,

Subsidy for the purchase of pigs/poultry birds.—The deserving and needy members of the Scheduled Castes are allowed a subsidy of Rs. 800 each for the purchase of four pigs of York-shire imported breed. The subsidy is given in kind, and the purchase is effected from the Government Piggery Farm/private farms. By March 31, 1970, a sum of Rs. 21,600 was utilised and 27 persons benefited under this scheme.¹

Advance of loans.—An interest-free loan to the tune of Rs. 200 each (it was Rs. 150 prior to 1969-70) to post-matric and Rs. 400 each to post-graduate Scheduled Castes students is advanced for the purchase of books and stationery. This loan is recoverable in 20 half-yearly instalments, and the recovery commences after four years of its disbursement. The scheme was introduced in 1967-68 and a sum of Rs. 27,650 was advanced by March 31, 1970.

The Scheduled Castes are advanced loans out of Harijan Kalyan Fund for setting up different trades and professions. The maximum amount of loan is Rs. 2,000 (Rs. 5,000 in case of certain specified trades) and the rate of interest three per cent. It is recoverable in 20 half-yearly instalments and the recovery commences after four years of its disbursement. The scheme was introduced in 1967-68 and the amounts as shown below were advanced as loan during 1967-68 to 1969-70 :

Year	Amount of loan ad- vanced	Number of loanees
	(Rs.)	
1967-68	1,05,050	181
1968-69	5,56,200	521
1969-70	2,18,500	320

Under another scheme which was operative only for the year 1968-69, a sum of Rs. 80,000 was advanced as loan to 80 persons for the purchase of residential plots. The loan is recoverable in 20 half-yearly instalments to be commenced after four years of disbursement.

Mention may also be made of some institutions working for the uplift of the backward classes. These are : Harijan Sewak Sangh, Karnal ;

1. The scheme was limited to pigs only and no amount was granted for poultry birds.

Depressed Classes League, Karnal ; Backward Classes League, Karnal ; and Hind Sweepers Sewak Samaj, Karnal. Besides, there is a Harijan Hostel at Panipat for Harijan students.

The problem of Harijan welfare is gigantic. Considering that Harijans form a sizeable part of the population, the funds available to finance deserving schemes are relatively meagre. Therefore, the schemes aimed at economic uplift of these classes have resulted in improvement of the economic condition of a very small number.

USE OF INTOXICANTS

The Karnal district does not fully observe the policy of prohibition in respect of the use of liquor and only conforms to observing two dry days, i.e. Monday and Tuesday, in the week as in the rest of the State.¹ There are 58 (3 wholesale and 55 retail) country liquor vends and 14 (5 wholesale and 9 retail) foreign liquor vends in various parts of the district. There has been a licensed distillery at Karnal since long and another licensed distillery was commissioned at Panipat in July 1969. There has been no liquor vend at Kurukshetra and Pehowa, being prohibited areas, since April 1, 1967, as places of sanctity. The consumption of excisable articles during 1958-59 to 1969-70 was as under :

Year	Country spirit	Indian-made foreign spirit	Bhang	Opium	Foreign liquor	Beer and wine
1	2	3	4	5	6	7
	(L.P. gallons)	(L.P. gallons)	(Seers)	(Seers)	(L.P. gallons)	(Bulk gallons)
1958-59	8,801	1,620	1,438	43	41	3,527
1959-60	11,296	1,625	1,292	3	39	4,650
1960-61	11,136	1,773	1,580	1	35	4,932
1961-62	20,887	2,094	3,232	0.80	33	4,561

1. This policy which was introduced on April 1, 1969, has been withdrawn since April 1, 1970

1	2	3	4	5	6	7
	(L.P. litres)	(L.P. litres)	(Kilo- grams)	(Kilo- grams)	(L.P. litres)	(L.P. litres)
1962-63	94,333	7,642	1,651	0.45	87	21,872
1963-64	1,52,634	21,761	2,916	—	65	24,413
1964-65	1,89,539	11,788	1,501	—	59	20,908
1965-66	2,14,830	10,136	—	—	37	21,726
1966-67	2,80,943	8,127	—	—	12	28,265
1967-68	5,04,819	16,366	—	—	25	39,980
1968-69	7,23,011	16,218	..	..	10	50,418
1969-70	6,27,892	19,492	—	—	15	64,531

The above figures show a continuous increasing trend in the consumption of country spirit. In the past, illicit distillation was rampant in the villages without a liquor vend. To curb this illegal, undesirable and harmful tendency, more and more liquor vends were allowed to be opened with the result that during the period 1958-59 to 1969-70 these almost doubled in number and no village remained at a distance of more than 5 miles from a country liquor vend. The suppression of illicit distillation, opening of new vends and improved financial position of the people in the rural areas has brought about a great spurt in the sale of country liquor.

A sudden increase in the consumption of Indian-made foreign liquor, beer and wine, is noticeable from 1962-63 onwards. This happened because of the deployment of a military contingent in the district. The figures of consumption show a decrease in 1964-65 after the withdrawal of the military contingent. The later fluctuations show that by and by people are getting addicted to the use of Indian-made foreign liquor and beer on an increasing scale. The result is that while there existed only three vends in 1963-64 for the sale of Indian-made foreign liquor, by 1967 the number rose to nine.

The figures of *bhang* show an abnormal consumption during 1961-62. In that year there was a booming sale of *bhang* at Kurukshetra during the solar eclipse fair. Besides the attendance of lakhs of people at this fair, a large number of *sadhus* and friars, generally addicted to *bhang*, were also among the visitors and stayed at Kurukshetra for about a month. This led to an abnormal sale and consumption of *bhang*. Its consumption was how-

ever banned by the Government after 1964-65. Since the imposition of a complete ban for the general public on the consumption of opium from April 1, 1959, the opium has only been supplied to the registered addicts through the Chief Medical Officer, Karnal. The evil of the use of drugs as an intoxicant which is only marginal in the district is sometimes noticed in the dry area of Kurukshetra.

The number of cases detected under Excise and Opium Acts during 1958-59 to 1969-70 was as under :

Year	Number of cases detected	
	Excise Act	Opium Act
1958-59	684	110
1959-60	768	141
1960-61	834	125
1961-62	1,061	122
1962-63	911	168
1963-64	1,124	209
1964-65	1,671	202
1965-66	1,688	181
1966-67	1,575	194
1967-68	1,627	262
1968-69	1,437	309
1969-70	1,791	285



सत्यमेव जयते

Chapter XVIII

PUBLIC LIFE AND VOLUNTARY SOCIAL SERVICE ORGANISATIONS

INTRODUCTION

Political activity began, as elsewhere, in the efforts of communal groups to organise themselves. It was reflected in local bodies. While the Indian National Congress worked for the country as a whole, other bodies like the Muslim League, the Hindu Mahasabha and the Singh Sabha, wherever and howsoever loosely organised, interested themselves in the groups they represented. These organisations became more firmly grounded when political developments offered a wider scope for their activities in the province as well as in the country. Political parties, as we know them, arose out of such organised bodies when they had to fight elections for the provincial and central legislative organs on party labels. This was in line with democratic developments elsewhere.

REPRESENTATION OF THE DISTRICT IN THE STATE AND UNION LEGISLATURES

According to the Constitution adopted by her, India became a Sovereign Democratic Republic on January 26, 1950. With the introduction of universal adult suffrage she has stepped forth as the world's biggest working democracy. The Constitution confers the right of vote on every citizen, male or female, of 21 years or above.

All the four General Elections have been conducted peacefully in the Karnal district. Besides, the Mid-Term Elections to Haryana Vidhan Sabha, held in May 1968, and to the Lok Sabha, held in March 1971, were equally peaceful, free and fair.

FIRST GENERAL ELECTIONS, 1952


The First General Elections were held in 1952. In spite of doubts expressed about the wisdom of adult suffrage, the results fully justified the confidence reposed in the common man and raised the credit of India in the international sphere.¹

1. *Report on the First General Legislative Elections in the Punjab, 1951-52*, p. 1,

The task of conducting the First General Elections in the whole State of the then Punjab was of great magnitude and complexity. The influx of displaced persons from Pakistan coupled with the extension of the franchise from 13½ per cent to about 50 per cent of the population required the preparation of almost entirely new rolls in a very limited time; delimitation of constituencies had to be undertaken afresh; over 7,000 polling stations had to be set up as against 1,300 in 1946; a large contingent of subordinate staff had to be made conversant with the new and complicated election procedure; and a host of other difficulties had to be overcome. Patient and laborious work, however, provided the foundation which proved exceedingly useful in the later elections.

The number of voters in the Karnal district was 6,00,267.

Lok Sabha.—There was a double-member constituency of Karnal for Lok Sabha, the details of which are given in Table LIII of Appendix. Both the legislators returned from this constituency were the Congress candidates. The number of valid votes polled by each of the contesting parties was as follows :—



Name of the party	Number of valid votes polled	Percentage of total valid votes polled in the district
Indian National Congress	3,55,391	42.16
Zamindara Party	47,907	5.68
Bhartiya Jan Sangh	95,809	11.37
Ram Rajya Parishad	89,475	10.62
Depressed Classes League	11,789	1.39
Independents	2,42,548	28.78
Total :	<u>8,42,919</u>	

Punjab Vidhan Sabha.—For the Vidhan Sabha, the district was split up into 10 constituencies consisting of 11 seats. Butana was the only

double-member constituency while the remaining, viz. Samalkha, Panipat, Karnal, Asandh, Gharaunda, Thanesar, Shahabad (Shahbad), Kaithal and Pundri were single-member constituencies. The details of these constituencies along with the number of votes polled by the candidates is given in Table LIV of Appendix. The Congress candidates were returned from all the constituencies. The number of valid votes polled by each of the contesting parties was as follows :—

Name of the party	Number of valid votes polled	Percentage of total valid votes polled in the district
Indian National Congress	1,76,492	44.06
Zamindara Party	40,618	10.12
Bhartiya Jan Sangh	58,592	14.63
Socialist Party	16,111	4.03
Independents	1,08,772	27.16
Total :	4,00,585	

Punjab Legislative Council.—Under section 10 read with the third schedule of the Representation of the People Act, 1950, the allocation of 40 seats in the Punjab Legislative Council was made as follows :—

- (1) 13 seats to be filled by election by the members of the Legislative Assembly,
- (2) 13 seats to be filled by election by the Local Authorities' constituencies,
- (3) 3 seats to be filled by election by the Graduates' constituency,
- (4) 3 seats to be filled by election by the Teachers' constituency and
- (5) 8 seats to be filled by nomination by the Governor.

One candidate belonging to Kaithal was elected from Ambala-cum-Karnal (Local authorities) constituency.

SECOND GENERAL ELECTIONS, 1957

The general elections in 1957 were attended in some respects with even greater difficulty and raised even more serious organisational problems as a consequence of the merger of erstwhile PEPSU (Patiala and East Punjab States Union) and Punjab. The number of voters in the Karnal district was 7,58,265.

Lok Sabha.—There was only one parliamentary constituency which returned the Congress candidate. The details are given in Table LV of Appendix. The number of valid votes polled by each of the contesting parties was as follows :—

Name of the party	Number of valid votes polled	Percentage of total valid votes polled in the district
Indian National Congress	1,19,388	46.6
Bhartiya Jan Sangh	50,787	19.8
All-India Scheduled Castes Federation	38,742	15.1
Independents	47,203	18.5
Total :	2,56,120	

Punjab Vidhan Sabha.—As in the First General Elections, there were 10 constituencies comprising 11 seats. Thanesar was a double-member constituency while the remaining 9 single-member constituencies were : Pehowa, Kaithal, Pundri, Rajaund, Karnal, Gharaunda, Panipat, Samalakha and Butana. The details of these constituencies are given in Table LVI of Appendix. The Congress candidates were returned from 7 constituencies (including the double-member constituency). Pundri and Rajaund voted for the Scheduled Castes Federation while Samalkha returned an Independent. The number of votes polled by each of the contesting parties was as under :

Name of the party	Number of valid votes polled	Percentage of total valid votes polled in the district
1	2	3
Indian National Congress	2,28,316	47.4

1	2	3
Praja Socialist Party	1,980	0.4
Communist Party of India	31,002	6.4
Bhartiya Jan Sangh	83,816	17.4
All-India Scheduled Castes Federation	43,947	9.1
Independents	93,117	19.3
Total :	4,82,178	

THIRD GENERAL ELECTIONS, 1962

The Third General Elections in 1962 were conducted in accordance with schedule which completed the poll on a single day both for the Parliamentary and Assembly elections. The number of voters in the Karnal district was 7,87,134.

Lok Sabha.—Unlike the previous elections, there were 2 constituencies, viz. Karnal and Kaithal, which returned the Jan Sangh and Congress candidates respectively. The details are given in Table LVII of Appendix. The number of valid votes polled by each of the contesting parties from both the constituencies was as given below :

Name of the party	Karnal constituency		Kaithal constituency	
	Total number of valid votes polled	Percentage of total valid votes polled in the constituency	Total number of valid votes polled	Percentage of total valid votes polled in the constituency
Indian National Congress	1,21,748	38.52	1,50,127	43.40
Bhartiya Jan Sangh	1,34,458	42.54	38,651	11.17
Republican Party	22,853	7.23	—	—
Swatantra Party	31,091	9.83	1,30,524	37.73
Ram Rajya Parishad	—	—	8,023	2.32
Independents	5,916	1.88	18,604	5.38
Total :	3,16,066		3,45,929	

Punjab Vidhan Sabha.—Following the splitting up of all double-member constituencies in the country by the Election Commission, Radaur constituency (reserved) was created out of the double-member constituency of Thanesar. Thus there were 11 constituencies in all. The extent of each of these constituencies is given below while the number of electors who voted, the number of contesting candidates, and their party affiliations and the number of votes polled by the candidates are given in Table LVIII of Appendix :

Name of constituency	Extent of constituency
1	2
Thanesar	Thanesar and Shahabad thanas, and Babain <i>zail</i> in Ladwa thana in the Thanesar tahsil.
Radaur (Scheduled Castes)	Radaur thana and Ladwa thana (excluding Babain <i>zail</i>) in the Thanesar tahsil; and Indri thana, and Baragaon <i>zail</i> in the Karnal Sadar thana) in Karnal tahsil.
Karnal	Karnal municipality and Karnal, Jundla and Ramba part- <i>zails</i> in Karnal Sadar thana in the Karnal tahsil.
Butana	Butana and Nisang thanas in the Karnal tahsil.
Pehowa	Pehowa and Gula (Guhla) thanas and Kaithal thana (excluding Kaithal municipality and Miranji Kaithal <i>zail</i>) in the Kaithal tahsil, and Thaska Saheb thana in the Thanesar tahsil, in the Karnal district; and Kangwal, Roshanpura, Chhapra, 'Jetpur, Kalawar, Jandheri and Danipur villages in the Ambala district.
Kaithal	Kalayath Kanungo circle (excluding patwar circles nos. 11 to 14) in the Narwana tahsil of the Sangrur district; and Kaithal municipality and Kaithal <i>zail</i> in Kaithal thana in the Kaithal tahsil of the Karnal district.
Rajaund	Rajaund thana and Pai <i>zail</i> in Pundri thana in the Kaithal tahsil.

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Pundri	Asandh thana and Pundri municipality and Pundri <i>zail</i> in Pundri thana in the Kaithal tahsil.
Gharaunda	Gharaunda thana and Kutail <i>zail</i> in Karnal Sadar thana in the Karnal tahsil; and Bhalsi <i>zail</i> in Urlana Kalan thana in the Panipat tahsil.
Panipat	Panipat City and Panipat Sadar thanas in the Panipat tahsil.
Samalkha	Samalkha thana and Urlana Kalan thana (excluding Bhalsi <i>zail</i>) in the Panipat tahsil.

Of these, 8 constituencies, *viz.* Thanesar, Radaur (Scheduled Castes), Karnal, Butana, Pehowa, Kaithal, Rajaund, and Samalkha, returned the Congress candidates while the remaining 3 constituencies of Pundri, Gharaunda and Panipat returned Independent, Swatantra and Jan Sangh candidates respectively. The total number of valid votes polled by each of the contesting parties was as follows :—

Name of the party	Number of valid votes polled	Percentage of total valid votes polled in the district
Indian National Congress	2,26,876	43.18
Communist Party of India	14,412	2.74
Bhartiya Jan Sangh	96,541	18.37
Republican Party	2,377	0.45
Praja Socialist Party	2,832	0.54
Swatantra Party	1,01,128	19.25
Ram Rajya Parishad	2,701	0.52
Independents	78,580	14.95
Total :	5,25,447	

FOURTH GENERAL ELECTIONS, 1967

By virtue of the Punjab Reorganization Act, 1966, Punjab was reorganized and the new State of Haryana with unicameral legislature was born on November 1, 1966. The number of voters in the Karnal district was 8,39,615.

Lok Sabha.—As in the Third General Elections, there were 2 constituencies for Lok Sabha, viz. Karnal and Kaithal, with some changes in their delimitations. The details of these constituencies are given in Table LIX of Appendix. Both these seats were captured by the Congress candidates. The valid votes, as follows, were polled by each of the contesting parties :—

Name of the party	Karnal constituency		Kaithal constituency	
	Total number of valid votes polled	Percentage of total valid votes polled in the constituency	Total number of valid votes polled	Percentage of total valid votes polled in the constituency
Indian National Congress	1,68,204	50.03	1,80,770	50.53
Bhartiya Jan Sangh	1,68,001	49.97	—	—
Swatantra Party	—	—	1,53,760	43.00
Independents	—	—	23,161	6.47
Total :	3,36,205		3,57,691	

Haryana Vidhan Sabha.—There were 16 constituencies in all. Their details pertaining to the number of electors who voted, the number of contesting candidates and their party affiliations, the number of votes polled by the candidates, etc., are given in Table LX of Appendix. The extent of these constituencies was fixed¹ as given below :

Serial number and name 1	Extent 2
10. Shahabad	Shahabad k.c. ² and p.c. ³ 's Salpani

1. Haryana Government Gazette (Extra ordinary) Notification No. S.O. No. 3600, dated the 23rd November, 1966, pp. 36-37.

2. k.c. stands for *kanungo* circle.

3. p.c. stands for *patwar* circle.

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- Kalan, Ajrana Khurd, Ajrana Kalan. Dunia Mazra, Thaska Miranji, Naisi and Kanthla in Thanesar k.c. in the Thanesar tahsil.
11. Thanesar Thanesar k.c. (excluding p.c.'s Salpani Kalan, Ajrana Khurd, Ajrana Kalan, Dunia Mazra, Thaska Miranji, Naisi and Kanthla) and p.c.'s Ban, Chhalaundi, Zainpur, Ladwa and Bakali in Radaur k.c. in the Thanesar tahsil.
12. Babain (SC)¹ Radaur k.c. (excluding p.c.'s Ban, Chhalaundi, Zainpur, Ladwa and Bakali) and Babain k.c. in the Thanesar tahsil.
13. Nilu Kheri (Nilo Kheri) Tirawari (Taraori) k.c. in the Karnal tahsil.
14. Indri Indri k.c. and Karnal k.c. (excluding Karnal municipality and p.c.'s Uncha Siwana, Kutail, Kambohpora, Karnal, Kailash and Pundrak) in the Karnal tahsil.
15. Karnal Karnal municipality and p.c.'s Uncha Siwana, Kutail, Kambohpora, Karnal, Kailash and Pundrak in Karnal k.c. in the Karnal tahsil.
16. Jundla (SC)¹ Jundla k.c. in the Karnal tahsil.
17. Gharaunda Gharaunda k.c. in the Karnal tahsil; p.c.'s Asandh (Nos. 1 and 2), Salwan and Jhabala in Rajaund k.c. in the Kaithal tahsil.
18. Samalkha Samalkha k.c. and p.c.'s Siwah, Nagla, Rana Mazra, Sanauli Khurd, Kurar, Ujah, Jalalpur and Nanhera in Panipat k.c. in the Panipat tahsil.
19. Panipat Panipat municipality ; Panipat k.c. (excluding p.c.'s Qawi, Shera, Madlauda, Bal Jattan, Kachrauli, Assan Kalan, Luhari,
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1. (SC) means that the seat is reserved for the Scheduled Castes.

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- Sutana, Siwah, Nagla, Rana Mazra, Sanauli Khurd, Kurar, Ujah, Jalalpur and Nanhera) in the Panipat tahsil.
20. Naultha Naultha k.c. and p.c.'s Qawi, Shera, Madlauda, Bal Jattan, Kachraul, Assan Kalan, Luhari and Sutana in Panipat k.c. in the Panipat tahsil.
21. Rajaund (SC) Rajaund k.c. [excluding p.c.'s Asandh (1 and 2), Salwan and Jhabala] in the Kaithal tahsil.
22. Pundri Pundri k.c. (excluding p.c.'s Bandrana, Pabnawa, Sarsa and Barna) in the Kaithal tahsil.
23. Sherhada Kaithal k.c. (excluding Kaithal Municipality and p.c.'s Ladana Baba, Manas, Gohna and Kaithal Patti Chaudhry) in the Kaithal tahsil.
24. Kaithal Kaithal Municipality and p.c.'s Ladana Baba, Manas, Gohna and Kaithal Patti Chaudhry in Kaithal k.c. and Gula (Guhla) k.c. in the Kaithal tahsil.
25. Pehowa Pehowa k.c. and p.c.'s Bandrana, Pabnawa, Sarsa, and Barna in Pundri k.c. in the Kaithal tahsil.

Of the above constituencies, 10, viz. Shahabad, Thanesar, Babain, Indri, Jundla, Gharaunda, Naultha, Rajaund, Pundri and Kaithal, returned the Congress candidates; 4, viz. Nilu Kheri (Nilo Kheri), Karnal, Samalkha and Panipat, returned the Jan Sangh candidates while the remaining 2, viz. Sherhada and Pehowa voted for an Independent and the Swatantra candidate respectively. The total number of valid votes polled by each of the contesting parties in the district was as shown below :

Name of the party	Number of valid votes polled	Percentage of total valid votes polled in the district
1	2	3
Indian National Congress	2,35,678	39.33
Bhartiya Jan Sangh	1,10,926	18.50

1	2	3
Communist Party of India	9,362	1.56
Communist Party of India (M)	7,165	1.20
Swatantra Party	49,986	8.34
Republican Party	21,753	3.64
Samyukta Socialist Party	434	0.07
Independents	1,63,950	27.36
Total :	5,99,254	

MID-TERM ELECTIONS, 1968 (VIDHAN SABHA)

Haryana Vidhan Sabha was dissolved and President's rule was enforced on November 21, 1967. The mid-term elections were held during May 1968. The number of voters in the Karnal district was 8,70,054. No change in the limits of the constituencies was made. The details regarding number of electors who voted, number of contesting candidates and their party affiliation, the number of votes polled by the candidates, etc., are given in Table LXI of Appendix. The Congress candidates were returned from nine constituencies, viz. Shahabad, Thanesar, Indri, Samalkha, Naultha, Rajaund, Sherhada, Kaithal and Pehowa, the Jan Sangh from two constituencies, viz. Gharaunda and Panipat, the republican from one constituency, viz. Jundla, and the Independent candidates from the remaining four constituencies, viz. Babain, Nilu Kheri (Nilo Kheri), Karnal and Pundri.

The total number of valid votes polled by each of the contesting parties in the district is shown below :

Name of the party	Number of valid votes polled	Percentage of total valid votes polled in the district
Indian National Congress	2,05,323	41.49
Bhartiya Jan Sangh	1,01,497	20.51
Swatantra Party	31,749	6.42
Communist Party of India	3,406	0.69
Communist Party of India (M)	3,632	0.73
Republican Party	18,677	3.77
Vishal Haryana Party	39,031	7.89
Bhartiya Kranti Dal	15,364	3.10
Independents	76,197	15.40
Total :	4,94,876	

MID-TERM ELECTIONS, 1971 (LOK SABHA)

Lok Sabha was dissolved and mid-term elections were held in March 1971, about a year ahead of the normal schedule. For the first time these elections were held without there being any candidate for the Vidhan Sabha seats. There were, as before, two constituencies for Lok Sabha, viz. Karnal and Kaithal, and no change in their limits was made. The details of these constituencies are given in Table LXII of Appendix. Both these seats were captured by the Congress candidates. The valid votes, as follows, were polled by each of the contesting parties :-

Name of the party	Karnal constituency		Kaithal constituency	
	Total number of valid votes polled	Percentage of total valid votes polled in the constituency	Total number of valid votes polled	Percentage of total valid votes polled in the constituency
Congress (Presided over by Shri Jagjivan Ram)	1,52,249	48.06	1,55,000	45.23
Congress (Presided over by Shri Nijalingappa)	22,558	7.12	1,29,462	37.78
Bhartiya Jan Sangh	1,16,988	36.93	—	—
Republican Party	6,449	2.04	—	—
Forward Block	—	—	6,604	1.93
Bhartiya Kranti Dal	—	—	10,895	3.18
Arya Sabha	—	—	13,077	3.81
Praja Socialist Party	—	—	3,300	0.96
Communist Party of India (M)	—	—	3,917	1.14
Independents	18,536	5.85	20,443	5.97
Total :	3,16,780	100.00	3,42,698	

MID-TERM ELECTIONS, 1972 (VIDHAN SABHA)

Haryana Vidhan Sabha was dissolved and the mid-term elections were held in March 1972. The number of voters in the Karnal district was 9,72,075. No change was made in the limits and number of constituencies of the Karnal district. Of the 16 constituencies, the Congress candidates were returned from 10 constituencies, viz. Shahabad, Thanesar, Indri, Jundla, Samalkha, Panipat, Naultha, Pundri, Sherhada and Pehowa ; the Jan Sangh candidates from two constituencies, viz. Nilu Kheri (Nilo Kheri) and Karnal; the Congress (O) candidates from Gharaunda and Rajaund while the Independent candidates from the remaining two constituencies, viz. Babain and Kaithal.

The following were the number of contestants and the seats won and the number and the percentage of valid votes polled by each party :—

Name of the Party	Number of con- tes- tants	Seats won	Valid votes polled	Percentage of total valid votes polled in the district
Congress	16	10	2,95,476	42.88
Bhartiya Jan Sangh	7	2	79,492	11.54
Congress (O)	9	2	98,441	14.29
Communist Party of India	2	—	19,749	2.87
Communist Party of India (M)	2	—	10,778	1.56
Republican Party of India (K)	1	—	1,961	0.28
Independents	60	2	1,83,139	26.58
Total :	97	16	6,89,036	

POLITICAL PARTIES AND ORGANISATIONS

There is no political party of significance in the district which may be regarded as purely local in character. The major ones are units of all-India parties. As such the Congress has been the most important party in the district in the years under review. In the First General Elections, it won all the 11 seats in Vidhan Sabha and both the seats in Lok Sabha. In the Second General Elections of 1957, the Congress monopoly of all the 11 seats in Vidhan Sabha was reduced to 8 ; out of the remaining 3, 2 went to the All-India Scheduled Castes Federation and 1 to an independent candidate. Unlike

the double-member parliamentary constituency of Karnal at the time of First General Elections, there was only one parliamentary constituency of Kaithal for the Second General Elections. Again the Congress candidate was returned from this constituency. In the Third General Elections of 1962, the Congress retained the previous number of 8 seats out of the total of 11 seats in Vidhan Sabha; the remaining 3 seats were captured one each by Jan Sangh, Swatantra and an independent candidate. This time there were 2 constituencies for Lok Sabha, viz. Karnal and Kaithal. The Jan Sangh candidate captured the seat at Karnal while the Congress candidate was returned from Kaithal. Before the General Elections of 1967, Haryana State had come into existence and the number of Vidhan Sabha Constituencies in the district had been increased from 11 to 16. Out of these, 10 went to Congress, 4 to Jan Sangh, 1 to Swatantra and 1 to an independent candidate. The Congress won both the Lok Sabha seats. The constitutional machinery having failed, Haryana Vidhan Sabha was dissolved and President's rule was enforced on November 21, 1967. There was no change in the constituencies for the Mid-Term Elections held during May 1968. Out of the 16 seats, the Congress won 9 seats, Jan Sangh 2, Republican Party 1, and the remaining 4 were captured by independent candidates. In the Mid-Term Elections of 1971 for the Lok Sabha, the Ruling Congress (presided over by Shri Jagjivan Ram) retained both the Lok Sabha seats previously captured by the Congress before it split. In the 1972 Mid-Term Elections of 1972 for the Vidhan Sabha, the Ruling Congress captured 10 out of 16 seats. Congress (O) and Jan Sangh shared 2 each while the remaining 2 seats were won by the Independents.

From the above analysis it is apparent that the Congress and Jan Sangh are the major all-India political parties whereas the Communist, Swatantra, Republican and Socialist though belonging to all-India category, are not very effective because of their poor following in the district. The Communist Party participated in all the General Elections since 1957, but failed to achieve any success. The Swatantra Party entered the arena in 1962 on the eve of the Third General Elections with a lot of fanfare and publicity but could not muster more than one Vidhan Sabha seat in each of the Third and Fourth General Elections and none in the Mid-Term Elections of 1968. They did not contest the Mid-Term Elections to the Lok Sabha and the Vidhan Sabha held in 1971 and 1972 respectively. The Socialist Party made a weak appearance till the Fourth General Elections and did not appear in the Mid-Term Elections of 1968 or thereafter. Some other local parties which came up from time to time without any concrete programme or

policy, disappeared from the field as quickly as they had come. The Zamindar Party, a legacy of the pre-Partition days, fought the First General Elections, but could not win a single seat with the result that it almost vanished and never staged a comeback. Similar has been the fate of Ram Rajya Parishad and Depressed Classes League. Appearing on the scene for the first time in the Second General Elections, the Scheduled Castes Federation met with some initial success as it captured 2 Vidhan Sabha seats. But it also could not maintain its identity and became extinct. Vishal Haryana Party and Bhartiya Kranti Dal ventured during Mid-Term Elections of 1968 without achieving any tangible success.

While on the subject of political parties, it should be noted that the Independents have been steadily fighting with varying degrees of success in all the Elections to Vidhan Sabha and Lok Sabha. As the name indicates, the Independents do not belong to a party nor do they have any programme completely in common. Some such candidates who are not serious from the beginning, realizing their slender chances of success, decide at once to withdraw from the elections at the slightest persuasion rather than face the prospects of forfeiting their securities. Others persist. Their existence and success reflect two features. Some defect from their previous political parties on account of personal differences or differences relating to their political programmes. Others are more like free lancers in the political field, who after their success, either continue to remain independent or give their support to another party. The astonishing fact that some independent candidates have been returned with a big majority is due to the situation that people, being disillusioned with tall promises of old political parties, are ready to support promising individuals in the hope that they would fight for public cause. In many cases, faith in the independent candidates proves to be a stronger factor of support than the vote-catching devices, well-worded political manifestos and platform speeches of the opposing candidates supported by the political parties. The result of the elections held so far reveals that one seat was captured each time by this group of candidates during 1957, 1962 and 1967 elections while 4 seats went to independent candidates during the Mid-Term Elections of 1968 and 2 in the Mid-Term Elections of 1972. The following percentage of votes obtained by independent candidates in different elections shows the varying degrees of public support received by them from the voters :—

1	Vidhan Sabha 2	Lok Sabha 3
First General Elections, 1952	27.16	28.74

	2	3
Second General Elections, 1957	19.30	18.50
Third General Elections, 1962	14.95	3.63
Fourth General Elections, 1967	27.36	3.20
Mid-Term Elections, 1968	15.40	
Mid-Term Elections, 1971		5.91
Mid-Term Elections, 1972	26.58	

It is a measure of the progress of liberalism that some districts in the State have been consistently electing lady legislators. Their list includes two from the Karnal district.

The position of different political parties represented in the legislative bodies can be seen at a glance from the table given below

Year of elections	Name of the party	Number of members elected		Total number of votes	Number of valid votes polled	Percentage of column 5 to 4
		Men	Women			
1	2	3	4	5	6	
Lok Sabha						
1952	Congress	1	1	15,30,064	3,55,391	23.2
1957	Congress	1	—	4,02,728	1,19,388	29.6
1962	Congress	1	—	9,95,295	1,50,127	15.0
	Bhartiya Jan Sangh	1	—		1,34,458	13.5
1967	Congress	2	—	9,48,014	3,48,974	36.8
1971	Ruling Congress	2	—	10,23,519	3,07,249	30.0
(Mid-Term)	(Presided over by Shri Jagjivan Ram)					
Vidhan Sabha						
1952	Congress	11	—	6,00,267	1,76,492	29.4
1957	Congress	7	1	7,58,265	1,80,729	23.8
	Scheduled Castes Federation	2	—		32,658	4.3
	Independent	1	—		22,431	2.9
1962	Congress	6	2	7,87,134	1,78,309	22.6
	Bhartiya Jan Sangh	1	—		19,939	2.5
	Swatantra	1	—		23,164	2.9
	Independent	1	—		18,755	2.3

1	2	3	4	5	6	
1967	Congress	8	2	8,39,615	1,65,440	19.7
	Bhartiya Jan Sangh	4	—		54,981	6.5
	Swatantra	1	—		13,010	1.5
	Independent	1	—		12,080	1.4
1968	Congress	7	2	8,70,054	1,34,883	15.5
(Mid-	Bhartiya Jan Sangh	2	—		24,723	2.8
Term)	Republican	1	—		14,253	1.6
	Independents	4	—		53,549	6.1
1972	Congress	9	1	9,72,075	2,04,317	21.0
(Mid-	Bhartiya Jan Sangh	2	—		28,483	2.9
Term)	Congress (O)	2	—		39,931	4.1
	Independents	2	—		41,823	4.3

Indian National Congress.—The party was formed in the district in 1929. It has participated in all the General Elections since Independence. As a result of split in the party in 1969, there emerged two distinct groups, i.e. one led by Shri Jagjivan Ram and the other by Shri Nijalingappa. The following details give an idea of the position and the hold of the party in the district :—

	Lok Sabha		Vidhan Sabha	
	Total number of seats	Seats captured by the Congress	Total number of seats	Seats captured by the Congress
First General Elections, 1952	2	2	11	11
Second General Elections, 1957	1	1	11	8
Third General Elections, 1962	2	1	11	8
Fourth General Elections, 1967	2	2	16	10
Mid-Term Elections, 1968	—	—	16	9
Mid-Term Elections, 1971	2	2 ¹	—	—
Mid-Term Elections, 1972	—	—	16	10

Bhartiya Jan Sangh.—Formed on the eve of the First General Elections, it established its branch in the district in 1952. During the Third General Elections, 1 candidate each was returned to Lok Sabha and Vidhan Sabha while 4 candidates were returned to Haryana Vidhan Sabha during the Fourth

1. Both the seats went to the Congress presided over by Shri Jagjivan Ram.

General Elections. In the Mid-Term Elections of 1968 and 1972, Jan Sangh could capture only two seats.

NEWSPAPERS AND PERIODICALS

Though the newspapers and periodicals play a forceful role in the life of the people, before Independence only one Urdu monthly, *Daulat-Ki-Barish*, was published from Panipat. Started in 1941, it has a circulation of 1,150 copies. It deals with commerce and industry. Amrit, the Urdu weekly, dealing with news and current affairs, which was originally established at Montgomery in Pakistan in 1937, started appearing from Karnal in 1947. It has a circulation of 2,000 copies. Between 1947 and 1968 another 51 have been added ; one of them being a Hindi daily, 11 weeklies (3 in Hindi, 4 in Urdu and 4 bilingual), 8 fortnightlies (2 in Hindi, 4 in Urdu and 2 bilingual), 15 monthlies (1 in English, 9 in Hindi, 2 in Urdu and 3 bilingual), one bi-monthly (Panjabi), 5 quarterlies (1 English, 1 bilingual and 3 multilingual), 1 four-monthly (multilingual), 6 half-yearlies (4 bilingual and 2 multilingual) and 3 annuals (1 bilingual and 2 multilingual). Of these 53 local publications, 15 are published in Hindi, 12 in Urdu, 1 in English, 1 in Panjabi and the remaining ones are either bilingual or multilingual. Except for the 9 bilingual periodicals (4 weeklies, 2 fortnightlies and 3 monthlies) generally dealing with current affairs, the bilingual and multilingual group of publications comprises mostly school and college magazines which are quarterly, four-monthly, half-yearly and annual publications. Some relevant details about these local publications are given in Table LXIII, of Appendix.

There is no local paper which has any particular political affiliations. Generally speaking, the local papers provide news and views which help in keeping their readers politically alive by discussing important political, social and economic problems which face the country at any time. Some local periodicals, sponsored by caste groups and other vested interests, however, present news and views from their own angle.

The intelligentsia depend upon papers and periodicals published outside the district. The educated class favours the English dailies. Most older people depend for their news fare on Urdu dailies though the younger generation, not knowing Urdu, depends on Hindi dailies. These periodicals also feed their readers with political reviews and comments in addition to general reading matter like short stories, biographies and poems. Particulars about the dailies and periodicals published outside the district and finding

circulation in the district given in Tables LXIV of Appendix illustrate the position indicated.

VOLUNTARY SOCIAL SERVICE ORGANISATIONS

Government cannot provide every thing for its people and, therefore, voluntary organisations to undertake different activities of public welfare are an essential part of any community's life. They usually require some financial support from the Government. There are a number of such voluntary social service organisations in the district engaged in a variety of public welfare activities.

The voluntary social service organisations in the Karnal district about which information is available can be broadly classified under six categories, viz.

- (a) Organisations promoting welfare in general including recreation and sports.
- (b) Organisations promoting constructive activities based on the Gandhiji's ideals of truth and non-violence.
- (c) Organisations promoting economic welfare.
- (d) Organisations promoting educational welfare.
- (e) Organisations offering medical relief.
- (f) Religious organisations promoting social objectives.

A brief review of the more important voluntary social service organisations functioning in the district is given below but it should be pointed out that the classification given above cannot be taken too rigidly :

(a) ORGANISATIONS PROMOTING WELFARE IN GENERAL INCLUDING RECREATION AND SPORTS

District Relief Fund Advisory Committee, Karnal.—This committee was constituted in 1954. Besides the Deputy Commissioner as its Chairman, the committee has three official and two non-official members (M.L.As.). Its aims include rendering of financial assistance to the District Red Cross Society (50 per cent of the net collections), Saket Council (2 per cent), Chief Minister's Relief Fund (5 per cent), Kusht Nivaran Sangh (5 per cent), Haryana State Council for Child Welfare (5 per cent) and the poor, blind, deaf and needy persons and institutions (33 per cent). The assistance


given to the individuals varies from Rs. 100 to Rs. 200 according to need and emergency. Its income is derived from the funds subscribed by the public, by organising sports meets, functions and other events. The collections from the public are raised annually in December. The following functions were organised during 1965—68 in aid of the District Relief Fund :—

1965 : A hockey match at Karnal and a variety show at Panipat.

1966 : A hockey match (between the women hockey team of Kurukshetra University and Sainik School Boys) at Karnal and cultural programmes (Jashan-e-Haryana) at Panipat, Kaithal and Thanesar.

1968 : Cultural programmes at Karnal, Panipat and Kaithal.

The details of income and expenditure of the committee from 1961-62 to 1969-70 are given below :



Year	Income	Expenditure
	(Rs.)	(Rs.)
1961-62	10,967	1,00,129
1962-63	87,843	16,627
1963-64	43,439	46,901
1964-65	31,291	26,013
1965-66	77,251	50,466
1966-67	51,567	38,131
1967-68	32,658	29,736
1968-69	42,977	13,473
1969-70	63,354	34,552

District Council for Child Welfare, Karnal.—The district council, a branch of the Punjab and Haryana States Council for Child Welfare, was established at Karnal in 1952. Its main objectives are to promote the welfare of children and to educate public opinion in this behalf. The council is running an art class and maintains a library, a hobby centre and a play centre for the children. Once a year, competitions in story writing and art, declamation contests and sports are arranged throughout the district for the

benefit of children. The winners are encouraged by the award of prizes. Public shows are organized for children below the age of three years. The Children's Day is celebrated on the 14th November when processions of children are taken out, sports competitions are held, and a number of variety shows are arranged. The main source of income of the council is from the sale proceeds of flower tokens sold in connection with the Children's Day celebrations. Membership fee and a grant from the District Red Cross Society also add to its income. The income and expenditure of the council for the years 1961—69 is given below :

Year	Income	Expenditure
	(Rs.)	(Rs.)
1961	3,500	3,000
1962	3,000	2,500
1963	2,690	3,750
1964	3,245	2,975
1965	2,500	2,400
1966	2,560	2,360
1967	2,675	2,495
1968	2,500	2,380
1969	2,700	2,650

District Red Cross Society, Karnal.—Red Cross is an international organisation embodying the ideal of help to the needy and is free from religious, sectarian or political affiliations. Its activities are directed mainly towards the improvement of health, prevention of disease and mitigation of suffering.

The District Red Cross Society at Karnal was established in 1932. After the formation of Haryana, it was affiliated to the Punjab and Haryana States Branch of the Indian Red Cross Society.¹ Its executive committee consists of 17 members (7 officials and 10 non-officials) with the Deputy Commissioner as President. The subscription from different categories of members is; honorary

1. The Punjab and Haryana States Branch was divided into three respective branches of Haryana, Punjab and Chandigarh Union Territory with effect from June 1971.

vice president, Rs. 10,000; patron, Rs. 5,000; vice patron, Rs. 1,000; life member, Rs. 150; annual member, Rs. 12; life associate, Rs. 50; and annual associate Rs. 1. The society, in 1969, had 50 life members, 100 life associates, 30 annual members and 23,944 annual associates. The figures of income and expenditure of the society for the years 1961—69 are given below :

Year	Income	Expenditure
	(Rs.)	(Rs.)
1961	51,062	74,102
1962	1,76,102	1,81,432
1963	1,15,490	1,23,180
1964	3,06,476	2,76,346
1965	2,76,447	2,40,248
1966	2,85,388	2,92,244
1967	2,16,391	2,09,563
1968	1,34,590	1,79,810
1969	3,12,651	2,12,339

Since the society does not have any fixed source of income and is mostly dependent on public contributions, its income and expenditure vary from year to year. An annual grant is also received from the Government in accordance with the expenditure incurred by it on family planning programme.

Before the reorganisation of the district in January, 1973, the society running was the following institutions :—

Name	Number	Location
Maternity and Child Welfare Centres	4	Karnal, Panipat, Shahabad (Shahbad) and Kaithal.
Nurse Dai Centres	2	Ladwa and Thanesar.
Family Welfare Planning Clinics	5	Karnal, Panipat, Kaithal, Shahabad (Shahbad) and Ladwa
Trained Dai Centres	7	Baraut, Bhana, Sink, Arnauli, Ghiyar, Kirmach and Ram Nagar.

Out of the three ambulance cars provided by the society at Karnal, Panipat and Kaithal, the two at Karnal and Panipat are even maintained by it. The society renders assistance to the needy persons in a number of ways. Sewing machines are provided to the widows of Jawans and other deserving

widows. The society bears the cost of the artificial limbs to be provided to the handicapped persons; it holds eye camps and camps for mental cases, provides spectacles to the poor and installs drinking water *piaos* for the general public. It also gives grants to institutions engaged in the task of ameliorating human suffering. Every possible assistance is rendered to help the needy during calamities like floods, fire and epidemics. Every year it spends a sum of about Rs. 30,000 for the supply of medicines to poor patients at different hospitals.

Hospital Welfare Section, Karnal.— An affiliated wing of the District Red Cross Society, the Hospital Welfare Section, Karnal, was established in 1950. It is also affiliated to the State Hospital Welfare Section. All the members are women. However according to its constitution, male members may also be recruited with the permission of its Executive. The number of members varies from year to year. However, in 1969 there were 44 members.

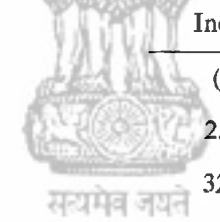
The members visit the hospitals off and on and render necessary help to the indoor patients. They provide medicines, quilts and other clothing. Artificial limbs are arranged for the handicapped persons, and blood donors for the Blood Bank of the Civil Hospital. On all important festivals, the section distributes fruits, sweets, etc., to the patients. Efforts are made to entertain the patients and keep up their morale.

The sources of income of the section include membership fee, grant from the District Red Cross Society, donations from the institutions and individuals, variety shows, etc. The following figures show income and expenditure of the section during 1961—1969 :—

Year	Income	Expenditure
	(Rs.)	(Rs.)
1961	2,500	2,000
1962	2,660	2,510
1963	1,845	1,685
1964	1,350	1,165
1965	1,510	889
1966	1,750	1,780
1967	1,700	1,345
1968	2,000	3,000
1969	9,280	9,250

Social Workers Home, Karnal.—The Social Workers Home, established in November 1949, is a society of honorary women social workers with its headquarters at Karnal. The home chiefly aims at promoting educational, economic and spiritual uplift of women and providing training and employment to the poorer sections among them in cottage industries. The idea is to enable them to earn their livelihood and become useful citizens. The home has its welfare-cum-work centres at Karnal (Ram Nagar), Tirawari (Taraori) (tahsil Karnal) and Thanesar (Sharifgarh) providing work to nearly 200 women. The products of these centres worth about Rs. 30,000 annually are sold through honorary social workers. In its effort to inculcate love for the soil among rural children the home runs a nursery and a middle school at Thanesar (Sharifgarh). The enrolment is about 275 children and no fee is charged. Assistance is also provided to the deserving students in the form of books, stationery, meals, milk and cash scholarships. The home also undertakes relief work.

The income of the home, as shown below, is derived from subscriptions, donations and sale of products of the work centres :



Year	Income (Rs.)	Expenditure (Rs.)
1961-62	25,037	24,048
1962-63	32,382	31,489
1963-64	35,541	32,567
1964-65	45,284	43,002
1965-66	40,933	34,333
1966-67	36,413	30,591
1967-68	41,001	35,634
1968-69	54,237	40,651
1969-70	54,842	45,973

Nagar Sudhar Sabha, Karnal.—This organisation, founded in Karnal in 1959, is meant to help the destitute and needy persons and improve the civic conditions in the town. It endeavours to remove social evils and extends help to fight against social injustice. It invites complaints from the people

and seeks the assistance of local authorities in removing them.

The membership of the Sabha is open to all persons irrespective of caste, creed or colour. It also runs an Urdu fortnightly paper Nagar Pukar. Its income is derived from sale of the paper and the advertisements contained therein and also voluntary subscriptions from the public. The Sabha handles about Rs. 2,000 to Rs. 3,000 annually.


Shraddha Nand Anathalaya, Karnal.—This Anathalaya or orphanage was started in 1927 under the guidance of Shri M.S. Anney, Ex-Governor and member of the Indian Legislature. Since its establishment, the Anathalaya has been doing very useful work for the welfare of orphans. The number of inmates does not remain steady since some of them leave it. In 1968-69 their number was 40 which included both males and females. The inmates are imparted education up to the primary standard in the Anathalaya and further studies are arranged in local D.A.V. Higher Secondary School. The orphanage also imparts technical education in carpentry, smithy, tailoring, *khadi* and hosiery.

Apart from receiving donations from the public and a grant from the Central Social Welfare Board, New Delhi, the Anathalaya earns substantial amount from the sale of goods produced by its inmates. The following statement shows the income and expenditure of the Anathalaya from 1962-63 to 1969-70 :—

Year	Income (Rs.)	Expenditure (Rs.)
1962-63	23,811	23,601
1963-64	28,989	28,030
1964-65	33,247	32,029
1965-66	30,602	25,784
1966-67	22,595	26,491
1967-68	28,460	31,572
1968-69	31,004	30,485
1969-70	40,946	35,298

Manav Sewa Sangh, Karnal.—A branch of the Manav Sewa Sangh which has its headquarters at Vrindavan (Uttar Pradesh) was established at Karnal in 1959. The Sangh aims at the service of mankind irrespective of caste, creed and colour. It renders financial assistance to the poor and deserving school students in the shape of free books and tuition fee. In summer, iced-water is served free to the public at the Railway Station, Bus Stand, outside Municipal Park and at other places in the town. Cold water is also served at fairs and public and religious processions and functions. In winter the needy persons are helped with quilts, blankets and clothes. The invalids, sick and unsupported old persons are provided with free meals, medicines, etc. The Sangh is running a library in the Municipal Park, Karnal.

The Sangh derives its income from voluntary public donations and members who subscribe a sum of money every month and sometimes the donation is in the form of material. The District Red Cross Society gives aid in the form of medicines. The year-wise income and expenditure of the Sangh during 1962—69, as given below, shows that the activities of the Sangh are becoming popular :



Year	Income	Expenditure
	(Rs.)	(Rs.)
1962	2,046	2,035
1963	1,699	1,543
1964	1,991	1,897
1965	2,491	2,363
1966	8,864	8,864
1967	12,181	12,181
1968	18,615	18,613
1969-70	24,086	24,086

Shri Sewa Samiti, Karnal.—The Samiti at Karnal was established in April 1949, and is affiliated to All-India Sewa Samiti. The aims and objects of this organisation are to preach the ideals of social service, to enlighten the public about social and economic problems, to help distressed persons, poor

students, widows, orphans, Harijans and poor people, to cremate unclaimed dead bodies and to assist the administration on the occasion of fairs, festivals, floods, accidents and epidemics.

The activities of the Samiti are not confined to the Karnal district. It sends its volunteers for social service to fairs and festivals held at various places in India. The Samiti runs an industrial home for girls, a public library and reading room, and a free allopathic dispensary at Karnal.

The income of the Samiti is derived from monthly subscriptions by the members, voluntary donations from the public, grants from Government and the District Red Cross Society, etc. Information about the income and expenditure during the period 1962 to 1969 is given in the following table :—

Year	Income	Expenditure
	(Rs.)	(Rs.)
1962	11,609	8,464
1963	12,621	7,746
1964	14,149	9,209
1965	18,774	13,319
1966	21,264	14,083
1967	27,041	20,954
1968	28,372	26,643
1969	27,466	26,048

Rotary Club, Karnal.—Rotary Club, Karnal was founded in 1953 by the leading citizens representing different trades, professions and vocations. It is recognised through an official charter by Rotary International, Evanston, Illinois, U.S.A. It has a membership of 42.

The club is a non-religious and non-political organisation, devoted to the ideal of service to the community. In particular, it encourages and fosters high ethical standards in business and professions, the application of the ideal of service by every Rotarian in his personal, business and community life, and the advancement of international understanding, goodwill and peace through world fellowship of business and professional men united in the ideal of service.

Weekly meetings are held by the club on every Thursday at the residence of its members by rotation, and learned persons are invited to give talks. The club awards scholarships to deserving students of local schools and colleges, renders assistance in case of natural calamities, and plays host to

guests from foreign countries. A free dispensary at village Budhakhera (near Karnal) sponsored by it is rendering valuable service by providing medical relief to the poor village patients and also helps in promoting family planning. The main source of income of the club is the monthly subscription by the members, half of which is remitted to the Rotary International as envisaged in its constitution.

Bharat Scouts and Guides Association, Karnal.—It is a semi-Government social service organisation and has its units in various middle, high and higher secondary schools of the district. The Deputy Commissioner is the District Scouts Commissioner and the District Education Officer is the Assistant Scouts Commissioner with Assistant Education Officer for Physical Training as District Scouts Master.

The aims and objects of the association include selfless service to country and humanity and to engender reverence for God, *dharma*.

District Olympic Association, Karnal.—It was established in 1956 as the District Sports Association which was later changed to District Olympic Association by the Punjab Olympic Association to which it had been affiliated. Till October 1966, the Deputy Commissioner used to be its President. Later, the Superintendent of Police, Karnal, as nominee of the District Hockey Association, was elected its President. The Association organises district sports annually and co-ordinates sports activities of various sports associations, viz. District Hockey Association, District Wrestling Association, District Basketball Association, District Volleyball Association, District Football Association, District Table Tennis Association and District Tennis Association.

The District Hockey Association has in the recent years organised a few international hockey matches at Karnal. A team from Ceylon played a match in February 1960, from West Germany in January 1961, from East Germany in April 1965, from Japan in December 1965 and again in June 1968, and from Holland in December 1969. It also organised a number of all-India hockey tournaments. After the reorganisation of Punjab a separate Hockey Association for Haryana was formed in 1967 with its headquarters at Karnal. This association is affiliated to the Indian Hockey Federation. It successfully organized with full and colourful olympic ceremonies the first Haryana Hockey Championship at Karnal in January 1968, in which twelve teams representing the District and Divisional Hockey Associations participated.

The District Wrestling Association organised international wrestling matches at Karnal, viz. Afghanistan Vs. India (April 1963) and New Zealand Vs. India (May 1964).

An inter-district and open State championship was organised at Nilu Kheri (Nilo Kheri) in 1963 by the District Table Tennis Association.

The Karnal district holds promise of playing a prominent role in the field of sports. The District Olympic Association has procured 10½ acres (4.25 hectares) of land for constructing a stadium and play fields.

The meagre sources of income of the association include annual subscription of affiliated District Games Association, grant-in-aid from the State Sports Department and the District Relief Fund and donations. The following figures show income and expenditure of the association during 1961-62 to 1967-68 :—

Year	Income	Expenditure
	(Rs.)	(Rs.)
1961-62	4,000	3,200
1962-63	5,000	4,500
1963-64	..	8,000
1964-65	12,000	13,000
1965-66	3,000	3,200
1966-67	3,000	2,800
1967-68	2,000	2,000

(b) ORGANISATIONS PROMOTING CONSTRUCTIVE ACTIVITIES BASED ON THE GANDHI Ji's IDEALS OF TRUTH AND NON-VIOLENCE

Ghandhi Smarak Nidhi, Patti Kalyana.—The office of Gandhi Smarak Nidhi was shifted in 1955 from Ambala Cantt. to Patti Kalyana. The land required was donated by the inhabitants of the village. It was shifted to Chandigarh on April 1, 1964, but shifted back to Patti Kalyana on June 1, 1967.

The main object of the Nidhi is to conduct and promote manifold constructive activities with which Mahatma Gandhi was associated during

1. These include *inter alia* national unity, international peace and amity, communal and social harmony and brotherhood, removal of untouchability and similar other social disabilities, prohibition of alcoholic and other narcotic drugs, promotion of *khadi* and other village and cottage industries and handicrafts, Nai Ta'lim or New Education (Pre-Basic and Post-Basic), adult education, education in health, hygiene and sanitation especially in the rural areas, social and economic equality, etc.

his life time and all such activities as are required in furtherance of the ideals of truth and non-violence. The Nidhi has 13 Gram Sēwa Centres, 3 Nai Talim Shalas, 1 Sarvodaya Bal Ashram and 18 Balwadis attached to the centres in Punjab, Haryana and Himachal Pradesh. In the Karnal district, the Gram Sēwa Centres are functioning at Bhudwal Majri and Karhans (tahsil Panipat) and the Balwadi Centres at Karhans, Patti Kalyana and Bhudwal Majri (tahsil Panipat). Besides, the Nai Talim Avasin Shala in Gandhi Smarak Nidhi, Patti Kalyana, is running on the lines of basic education. It is up to 6th class and 60 boys and girls receive education. It is a residential Shala and the children between the age of 5 to 7 years are admitted. Gram Sewikas are trained at the Gram Sēwa Training Centres. All the trainees after completing a course of 18 months, are provided jobs in different centres. One such training centre had been functioning at Patti Kalyana which was closed in April 1968. The Nidhi has a number of Gandhi Study Circles spread all over Punjab, Haryana and Himachal Pradesh. These centres provide facility for the study of Gandhian literature. The Nidhi also gives financial aid to other institutions engaged in welfare activities on Gandhian lines.

The Gandhi Smarak Nidhi, Rajghat, New Delhi, is the financing authority for the Gandhi Smarak Nidhi, Punjab, Haryana, and Himachal Pradesh. The income and expenditure position of the Nidhi for carrying out its activities in the Karnal district during 1961 to 1969-70 is exhibited below :

Year	Income	Expenditure
	(Rs.)	(Rs.)
1961	191	36,896
1962	275	39,899
1963	156	36,270
1964	6,913	59,870
1965	8,397	71,177
1966	13,821	86,760
1967-68 ¹	27,886	92,703
1968-69	18,601	53,517
1969-70	20,334	45,403

1. Prior to January 1, 1967, the calendar year was reckoned as the financial year. Thereafter the financial year was counted from January 1, 1967 to March 31, 1968 (first year for 15 months). Since then, the normal financial year is being followed.

(c) ORGANISATIONS PROMOTING ECONOMIC WELFARE

Khadi Ashram, Panipat.—It was in 1947 that a Central Relief Committee was formed to help in resettling the displaced persons from the West Punjab (Pakistan). It continued its work up to 1952. The Punjab Relief Committee took to this work independently with the capital left by the Central Committee and in 1953 its name was changed to Khadi Ashram. It functioned at Ambala City from 1955 to 1960 when it was shifted to Panipat. The institution is aided by the All India Khadi and Village Industries Commission, Bombay. Some of its important objects are to provide employment opportunities, utilise the raw material and produce articles for meeting the basic needs of villagers, and to inculcate the spirit of co-operation among them. The village industries promoted by this institution include hand-made paper, *ghani* oil, hand-pounded rice, soap prepared from non-edible oils, pottery and *ban* manufacture.

(d) ORGANISATIONS PROMOTING EDUCATIONAL WELFARE

Rashtriya Vidya Samiti, Kaithal.—This Samiti was registered on January 18, 1954. The object of the Samiti is to promote education. It started the Radha Krishna Sanatan Dharam College at Kaithal in 1954. The main source of income of the Samiti is a voluntary levy of 2 paise per transaction of one hundred rupees by the businessmen and commission agents of Kaithal. Besides, donations also add to its funds. The following figures show income and expenditure of the Samiti during 1961-62 to 1969-70 :—

Year	Income (Rs.)	Expenditure (Rs.)
1961-62	15,519	15,519
1962-63	14,886	4,886
1963-64	15,349	15,349
1964-65	15,909	15,909
1965-66	18,569	12,402
1966-67	13,606	1,003
1967-68	19,352	4,003
1968-69	15,058	2,073
1969-70	15,679	62,000

The increase in income is due some time to more collection from levy or donations and decrease in income results from fall in levy on account of slump in the market. The items of expenditure include expenses on printing and stationery, postage, aid to R.K.S.D. College, Kaithal for meeting deficit and construction of its buildings, etc. The construction work having been suspended, there was less expenditure during 1966-67, 1967-68 and 1968-69.

(e) ORGANISATIONS OFFERING MEDICAL RELIEF

District Tuberculosis Association, Karnal.—It was formed in 1948 to look after the needs of the patients suffering from tuberculosis. A tuberculosis clinic with 18 beds was established in 1954 in the premises of the Civil Hospital, Karnal. Before the State Government took over the charge of this clinic in April 1967, it used to give grant-in-aid to the association to supplement the public donations received by it. Now the main function of the T.B. Association is to concentrate on the post-care of the patients on discharge from the hospital and to meet their immediate needs for food, clothing, transport, etc. The association also helps in domiciliary treatment of the patients suffering from T.B. and to bring the suspected cases to the clinic for early diagnosis and treatment.

Shri Sanatan Dharam Mahabir Dal, Karnal.—Shree Sanatan Dharam Mahabir Dal Punjab, was founded by late Pandit Madan Mohan Malviya, the great Indian patriot, as a voluntary social organisation devoted to human service. The Dal at Karnal was established in January 1963 and is running Free Eye, Maternity and Family Planning Hospital at Karnal². It had been organizing a free eye camp every year since 1964 which was attended by a large number of patients from all over the district and the adjoining areas. The patients suffering from cataract, glaucoma, trichiasis, pterygium, etc., were operated upon and were also provided medicines, board and lodging for which no fee was charged. Such camps have been discontinued since May 1968 in view of the facilities afforded at the hospital run by the Dal. A free reading room, which is visited by about 100 persons daily, offers Hindi, English and Urdu daily newspapers and weeklies. The volunteers of the Dal, numbering about 50, render free service at the time of fairs within the district and even outside the State as far as Hardwar and Allahabad. Their assistance during floods, fires and other unforeseen calamities has always been useful. At the time of Pakistani aggression in 1965, its volunteers did commendable service. A

1. For more details see Chapter on 'Medical and Public Health Services'.

2. Ibid.

free canteen near by-pass on G.T. Road (NH1) was organised where not only tea, biscuits, cigarettes and meals were served to the Jawans of the fighting forces passing that way but also their vehicles were repaired and in certain cases petrol and other spare parts like fan belts and dynamos were supplied free of cost. Free rations were also supplied to the members of the Home Guards patrolling the bridges and railway lines in those days. The Dal has also constructed Shree Hanuman Ji Temple where *katha*, *satsangh* and lectures on religious and philosophical subjects are arranged for the general public. Besides, it also runs Chaman Lal Mahabir Dal Industrial Training School for Women.

The main source of income of the Dal comprises public donations received in the shape of monthly subscriptions which amount to about Rs. 1,400 per month. A shopping centre consisting of 10 shops is the immovable property belonging to the Dal and fetches about Rs. 1,100 per month as rent. It also receives aid in the form of medicines from the District Red Cross Society. The deficit, if any, is met by donations from the members of the Managing Committee or other philanthropists of the district. The income and expenditure of the Dal for the years 1966-67 to 1969-70 is shown below :

Year	Income	Expenditure
	(Rs.)	(Rs.)
1966-67	58,139	62,674
1967-68	93,954	95,107
1968-69	1,10,640	1,26,644
1969-70	1,24,960	1,12,918

(f) RELIGIOUS ORGANISATIONS PROMOTING SOCIAL OBJECTIVES

Shri Kurukshetra Restoration Society, Kurukshetra.—The society was established in 1918 for the preservation and restoration of holy places within the area called Dharmakshetra in the holy texts. It runs a Gita Library in the Gita Bhawan, Kurukshetra. The society has constructed 8 bathing ghats, each with a length of 100 feet and costing approximately Rs. 8,000. It has also constructed three sets of rooms in the Gita Bhawan premises at a cost of about Rs. 15,000. Such works are executed out of the funds collected through charity donations. The society provides free board and lodging to a large number of pilgrims at the time of solar eclipse fairs and also arranges *Gita* and *kavi sammelans*.

Panchayat Brahman, Kurukshetra.—It is a very old cultural organisation which has been striving for the preservation of the holy land, Kurukshetra, since the Muslim rule. It has well defined rules and regulations to govern its operations and activities. The objects of this organisation include *inter alia* the management of different kinds of funds and movable and immovable properties of the *tirthas* situated in and around Thanesar, to remove evil customs and to spread education, specially the knowledge of Hindi and Sanskrit, among the Brahmans, to grant scholarships and stipends to students, widows, other deserving persons and institutions, to work for religious uplift, to provide facilities to the visitors and pilgrims and to assist the authorities and private organisations in organising religious, social and cultural affairs, etc.

Shri Sewak Sabha, Karnal.—The Sabha was started in 1937. It is open to every Hindu and its membership is about 100. The main objects of the Sabha are : to celebrate religious festivals, to look after the important religious places in the district and to carry out improvements in them, to hold spiritual and religious meetings, to help needy persons in distress and to promote brotherhood in the society. The organisation manages a *sat sangh* (prayer) hall, a *snanagar* (bathing place) and local cremation ground (Shiv Puri). The Sabha has a public library housed in its *sat sangh* hall.

The public voluntary donations constitute the main source of its income. The following figures show income and expenditure of the Sabha during 1964 to 1969 :—

<u>Year</u>	<u>Income</u>	<u>Expenditure</u>
	(Rs.)	(Rs.)
1964	1,840	706
1965	2,538	2,226
1966	8,592	9,525
1967	4,775	4,759
1968	10,650	7,929
1969	7,715	8,391

Arya Samaj, Karnal.—Arya Samaj was founded in India by Swami Dayanand Saraswati. It has a number of branches both in the urban and rural areas of the Karnal district. Six of its branches are functioning in the Karnal town. These are : (i) Arya Samaj, Holi Mohalla-established in 1892 ; (ii) Arya Samaj, Kot Mohalla-established in 1916 ; (iii) Arya Samaj, Dayalpura (College Section)—established in 1925 ; (iv) Arya Samaj, Ram Nagar-established in 1949 ; (v) Arya Samaj, Model Town-established in 1950 ; and (vi) Arya Samaj, Prem Nagar-established in 1950.

The Arya Samaj does not believe in the old established religious practices of the orthodox Hindus. It aims at reforming the Hindu society by the propagation and revival of the Vedic learning. Religious discourses are delivered in the Samaj temples where Yajnas are also performed strictly in accordance with Vedic rites. Special discourses by religious scholars are also arranged at the time of annual functions and other celebrations.

The Samaj has done a great deal in spreading education, specially the education of women, by opening a number of schools and colleges. Uplift of Harijans, widow marriage, eradication of illogical and orthodox beliefs, protection of cows and propagation of Hindi are some of the other activities of the Arya Samaj.

The Arya Samaj, Holi Mohalla started R.D. Boys' School in 1923. But it had to be closed and in its place R.D. Kanya Pathshala was started in 1952, which was raised to a high school in 1957.

The real credit for the opening of a number of educational institutions at Karnal goes to the Arya Samaj, Dayalpura (College Section). The list of these institutions include D.A.V. College for Women, D.A.V. College of Education for Women, D.A.V. Higher Secondary School, Dayanand Arya Girls High School (Jhelum)¹ and Dayanand Model High School.

Arya Samaj, Holi Mohalla, Karnal is running a *baraat ghar* and a free dispensary. Similarly, Arya Samaj, Prem Nagar, Karnal is running a reading room, a *baraat ghar* and a free dispensary.

Subscriptions from the members and donations by the public constitute the two main sources of income of almost all the branches of the Samaj.

1. Dayanand Arya Girls High School (Jhelum) was the first educational institution started by a voluntary organisation at Karnal.

Kurukshetra Development Board, Kurukshetra.—This board is an autonomous organisation set up by the State Government on August 1, 1968. It has 11 official and non-official members including Shri Gulzari Lal Nanda, Member of Parliament, as its chairman and the Chief Minister, as the Vice-Chairman. The board has been established for the development of sacred *tirthas* of Kurukshetra in an endeavour to provide befitting environments and better facilities to the millions of devotees who journey to this sacred region year after year for the satisfaction of their religious yearning. Through an integrated development of the region, it was intended to make amends for the neglect and indifference hitherto shown, in a manner worthy of this region's exalted past and as an eternal source of inspiration for posterity and reclaim its lost glory. The board has therefore undertaken the overall development of Kurukshetra including landscaping and renovation of historical places and sacred religious tanks and provision of civic facilities to pilgrims and tourists in accordance with the comprehensive master plan. For a tourist, besides the Kurukshetra University, the area is strewn with a number of sites of purely historical or archaeological interest. The main feature of the project is the renovation of the sacred Kurukshetra Tank—the Brahm Sar or Brahm Sarovar - by desilting and construction of spacious ghats all round. Other schemes include building of roads and drains, rest houses and serais, laying out of parks and orchards, provision of transport and sanitary facilities, etc. It is also proposed to build a tourist bungalow with single, double and dormitory sets. For the implementation of this project, the services of technical experts of the concerned departments of the State, viz. Architecture, Public Works and Town and Country Planning, have been made available to the board.

The whole project which is being entirely financed by Haryana Government, is estimated to cost Rs. 5 crores. The development programme is to be taken in hand in a phased programme according to the availability of funds. The first phase to renovate and beautify Kurukshetra was completed at a cost of Rs. 1.3 crores up to March 31, 1974. The Kurukshetra Tank was cleaned and bathing ghats to accommodate 10 lakh pilgrims were constructed. The formal inauguration of the tank took place on May 17, 1974, when the Satluj waters from the Gobindsagar flowing in the Narwana Branch of the Bhakra Canal System were released into the holy tank in the presence of a large number of holy men from all over India.

A brief mention about some special features and renovation of the Kurukshetra Tank would make an interesting study. This tank used to get filled with drainage water during the rainy season from nullahs bringing heavy

charge of silt which would get deposited in the bed of the tank. These inlets have been plucked thus preventing the entry of rain and all sorts of dirty water. The tanks was first dewatered and then desilted up to a depth of 15 feet. (4.6 metres) Siltfree canal water is now supplied to the tank through a periphery duct with outlets all along at suitable distances so that the water pours into the tank from all the four sides and there is no weed growth. One can clearly see the typical touch of ancient architecture combined with modern material and maintained in yet having a monumental outlook. The sanctity of the tank has been well this concept. In the first phase only the western half of the tank has been renovated. There is a 20 feet (6 metres) wide bathing bench all around the tank with a depth of only 4 feet (1.2 metres) for the pilgrims to take a holy dip. Previously the pilgrims used to take a bath on a few uneven steps which always remained congested and jammed with bathing pilgrims. At the edge of the bathing bench a concrete protection railing has been constructed as a safeguard against drowning tragedies for which rescue arrangements have also been separately provided.

According to Hindu mythology, the holy bath is not considered complete unless *prakrama* around the tank is performed. For this purpose, a 37 feet (11.3 metres) wide platform with red stone flooring has been constructed around the tank immediately after the steps. Similarly, a covered *prakrama* has also to be provided thereafter. It is but customary that *puja* is performed after the holy dip. Accordingly, prayer cells at different intervals are to be constructed on each side of the tank. Similarly, congregation halls have been provided for religious discourses and *bhajan-kirtans*. Besides the facilities of flush-type lavatories and urinals and bath-rooms for washing clothes, 16 shops on each side of the tank will cater to the pilgrims' needs of flowers, *puja* material, religious books, fruits and other necessities. All these works on the western side of the tank have been completed. Separate bathing arrangements for ladies include 10 bathing ghats under the deck jetties. Such a facility had been conspicuous by its absence heretofore. For keeping in tact the sanctity of the tank, shoe racks have been provided for the pilgrims to deposit their shoes there and visit the tank bare-foot.

A sum of Rs. 1.3 crores has been spent under this project up to March 31, 1974. The other completed works include four approach roads, viz. (i) Jhansa to Sthaneshwar Temple, (ii) Sthaneshwar Temple to Sheikh Chehli's Tomb, (iii) along the south-eastern corner of the tank and (iv) around the Sannihit Tank ; 3 lavatory blocks, for both men and women, with septic tanks and soakage pits at suitable places around the tanks ; development of a lake

at Jyotisar, supply of fresh canal water to Sannihit Tank, repair and supply of fresh canal water to Pundarak Tank at Pundri and Saraswati Tank at Pehowa.

The works like super structure, red sand stone flooring, etc., which are already in progress on the western half of the tank, will be completed in the second phase. It is also proposed to have a big car parking to accommodate 1,000 vehicles at a time on the eastern side and a concrete bridge in the centre of the main tank. Besides metalling, tarring and final carpeting of various roads leading to the tank, the entire slope on the eastern and northern sides will be landscaped with suitable plantations and shrubberies. The entire south side between the tank and the Amin Minor will also be land-scaped suiting its environments. The renovation and regular supply of fresh canal water to Sannihit Tank, Saraswati Tank at Pehowa, Phalgu Tank at Pharal, Pundarak Tank at Pundri and Kapil Muni Tank at Kalayat are also to be taken up subsequently in the second phase.

There are also other numerous organisations in the district doing social work. Prominent among these are : R. S. Chowdhri Partap Singh Charitable Trust Society, Karnal ; Ba-Bapu Shiksha Samiti, Kaithal ; Haryana Social Welfare Society, Kaithal ; Feroze Gandhi Memorial Institute , Kaithal ; Bal Shiksha Samiti, Kaithal and Hindu Shiksha Samiti, Kurukshetra. Among the socio-religious organisations the name of Shri Sanatan Dharm Sabha, Karnal, is worth mentioning.

सत्यमेव जयते

Chapter XIX

PLACES OF INTEREST

The Karnal district has its due share of places of interest among which Kurukshetra and Thanesar take a prominent place of all-India importance. These are described below in the alphabetical order.

AMIN (TAHSIL KARNAL)

Twenty-nine kilometres from Karnal in the north, Amin village is situated half-way between Tirawari (Taraori) and Kurukshetra about 2 kilometres west of the Grand Trunk Road (N.H. 1) with which it is linked by a metalled road. It lies at 29° 54' 16" north latitude and 76° 52' 09" east longitude. Its population which was 2,990 in 1961, increased to 3,475 in 1971. It is situated on a huge and lofty mound measuring about 2,000 feet (610 metres) in length from north to south, 800 feet (244 metres) in width and with a height of 50 to 60 feet (15 to 18 metres).

Amin is said to be the traditional site of *Chakra-Vyuha*, a strategic arrangement of the army of the Kaurvas, planned by Guru Dronacharya to trap the forces of the Pandavas led by Arjuna's warrior son, Abhimanyu, during the famous battle of Mahabharata. Amin is also known as 'Abhimanyu Khera' or the mound of Abhimanyu. Abhimanyu was killed by Jayadratha inside the Chakra-Vyuha. It was at Amin that two inscribed red-stone rectangular pillars were discovered and these are lying in the shrine of Thakurji on the west bank of the Suraj Kund¹. These pillars are carved on all the four sides and have no sockets for cross bars. They would thus appear to have supported some sort of a platform. The inscriptions on them are in characters of the Kushan period, but are quite short and merely supply the names of their donors.² But this dating by Spooner does not tally with the art of the time. The depiction of the trading and artistic activities of the people carved on these pillars appears to have been the work of some Sunga artists.³

1. Besides the pillars, large size bricks which were usually made in ancient times, and minor antiquities including a slab and a round stone lid of a large size box, were found there.

2. D.B. Spooner, *Annual Report of the Archaeological Survey of India*, 1921-22, p. 47. He also held that these "two sculptured posts in red stone of the Kushan period, must have been imported from Mathura." *Annual Report of the Archaeological Survey of India*, 1922-23, p. 90.

3. R.C. Agrawala, *Early History and Archaeology of Kurukshetra and Ambala Division*, (*Indian Historical quarterly*, December, 1955).

ASANDH (TAHSIL KAITHAL)

Forty-five kilometres south-west of Karnal on Karnal-Jind Road, this village lies at 29° 31' 16" north latitude and 76° 36' 19" east longitude. Its population was 8,272 persons in 1961 and increased to 11,943 in 1971.

The village played a prominent part during the 1857 Uprising. The villagers refused to pay revenue and drove out the police and government officials. After re-establishing their authority, the British allowed Asandh to be looted, demolished the fort, punished the villagers, inflicted heavy fines and increased the land revenue by 10 per cent. After Independence, the Government has established a Shahidi Smarak to commemorate the part played by the people of the area in the freedom movement.

The places of public utility include a canal rest house, a police rest house, a Government high school, a veterinary hospital, a primary health centre, a police station, a post and telegraph office and a telephone exchange.

GHARAUNDA (TAHSIL KARNAL)

Although a small town, it is an important market of the area and is situated on the Grand Trunk Road, about 18 kilometres south of Karnal. It has also a railway station on the main Delhi-Ambala railway line. It lies at 29° 32' 09" north latitude and 76° 58' 14" east longitude. Its population which was 10,496 in 1961, increased to 13,045 in 1971.

The town was once an important place on the ancient highway. A serai which was built by Khan Firuz in the reign of Shah Jahan in about A.D. 1632, was a striking specimen of early Mughal architecture. It is in ruins now, but its two imposing gates are still virtually in tact. It is said that these gates were constructed by two different persons, *Mamu* and *Bhanja*, but these came out to be similar structure though the two architects did not consult each other.

Gharaunda was the headquarters of the Karnal tahsil up to 1868 when it was shifted to Karnal.

The places of public utility include a police station, a Government higher secondary school for boys, a Government high school for girls, a veterinary hospital, a municipal library, primary health centre, a dak bungalow, Shri Ved Vidyalaya Gurukula, a post and telegraph office and a telephone exchange.

GULA (GUHLA) (TAHSIL GULA)

Gula is the headquarters of the tahsil of the same name. It is situated in the north-west of Karnal at a distance of 82 kilometres. It is about 27 kilometres north of Kaithal and is linked with the Kaithal-Patiala Road at a market centre called Cheeka by a stretch of about three kilometres of metalled road. It lies at 30° 02' 19" north latitude and 76° 17' 56" east longitude. Its population, which was 1,441 persons in 1961, increased to 2,048 in 1971.

Gula is mentioned by Timur in his memoirs as the place where his invading army crossed the Ghagghar by a bridge which, though in a reparable condition, is still to be seen over the old Puran Branch of the river. His route, described in his autobiography as also in *Zafar-nama* can be easily traced except between Munak (Akalgarh) and Asandh.¹

There exists an old *mazar* (mausoleum) of Miran Bahar Ali Shah having a tomb surrounded by walls on all sides. A fair is held here in May-June annually which is attended by both Hindus and Muslims. It is said that mad persons get cured when they visit this tomb as an act of faith.

The places of public utility include a police station, a post and telegraph office, a civil rest house, a veterinary hospital and a primary health centre.

INDRI (TAHSIL KARNAL)

Indri, an important village 24 kilometres north-east of Karnal on the Western Jumna (Yamuna) Canal, lies at 29° 52' 43" north latitude and 77° 03' 38" east longitude. Its population was 2,846 persons in 1961 and increased to 4,630 in 1971.

In early days, it was in the sirkar of Saharanpur (Uttar Pradesh). Subsequently, it was owned by the Nawabs of Kunjpura. It is associated with 'Nihal Dey and Sultan'—famous folk-tale of Haryana. Ruins of Sheesh Mahal said to belong to Sultan and the Naulakha Bagh of Nihal Dey reputed to contain nine lakh varieties of plants, can still be seen there.

The places of public utility include a police station, a post and telegraph office, a telephone exchange, a Government high school, a canal rest house, a primary health centre and a veterinary hospital.

KAITHAL (TAHSIL KAITHAL)

Kaithal, the headquarters of the tahsil of the same name, lies at 29° 48' 09" north latitude and 76° 23' 45" east longitude, 63 kilometres

1. For more details, Chapter on 'History' may be seen.

west of Karnal, with which it is linked by a metalled road (Kunjpura-Karnal-Kaithal-Khanauri Road). Besides, the other two State Highways which pass through Kaithal are : (i) Kala Amb-Ambala-Pehowa-Kaithal-Narwana-Fatehabad Road (S.H. 2) and (ii) Meerut-Sonepat-Gohana-Asandh-Kaithal-Patiala Road (S.H. 11). It has also a railway station on the Kurukshetra-Narwana section. Its population was 34,890 in 1961 and increased to 45,199 in 1971.

The town is situated on the banks of an extensive artificial lake, called the Bidkiyar Lake with numerous bathing places and flights of steps. A high wall partly of *pakka* bricks and partly of mud enclosed the town. It had 8 gates of which Karnal Gate to the east, Keorak and Suraj Kund Gates to the north and Kasai and Dogran Gates to the west were the principal ones. These gates are now in a dilapidated condition though they still mark different exits from the old town.

The town is said to have been founded by the famous *Mahabharata* hero, Yudhishtira, in commemoration of Pandavas' victory in Mahabharata against the Kauravas. He had selected the site because of its traditional association with Hanuman, the monkey-god, and named it as Kapisthala, a Sanskrit word meaning 'an abode of monkeys'¹, which later came to be known as Kaithal. Even now in the suburbs of the city, on the Bidkiyar Lake and Suraj Kund, thousands of monkeys can be seen. In the heart of the town, there is a palatial temple in which Hanuman is worshipped. It appears that Kaithal which was more or less a rural settlement before, assumed the character of an urban location about the period of Mahabharata.

It is stated that a battle was fought near Kaithal between Sultana Raziya and the rebel forces of Delhi. Sultana was killed and buried at this place. In *Tabaqat-i-Nasiri*, the author Minhaj-ud-din bin Siraj-ud-din writes that when Sultana Raziya and Malik Altuniya reached Kaithal during their flight, the rebel forces left them and they were arrested by the Hindus and were killed. This defeat took place on the 24th *Rabi ul awwal* A.H. 638 corresponding to October, 1240. Sultana Raziya was assassinated on the following day.²

1. In the east of the town there is a mound about which it is said that Hanuman was born at this place. This mound is known as Anjni Ka Tila (Anjni was the mother of Hanuman).

According to another tradition, Hanuman was created by the Gandharvas at the Amrita Tiratha, which is near village Pabnava—11 miles (18 kilometres) to the south-east of Thanesar (cf. Kurukshetra Darpan).

2. Elliot and Dowson, *The History of India, As Told by Its Own Historians, Volume II*, 1969, p. 337.

However according to Iban Batuta, Sultana Raziya was murdered by a rustic for the sake of her jewels close to the spot where a grave is still seen near the Turkman Gate of the present city of Delhi.

The town was renovated and a fort constructed during Akbar's reign. After the Third Battle of Panipat, the Sikhs conquered the area between the Satluj, Ghagghar and the Saraswati streams and plundered the towns. Kaithal was then under the possession of a Nawab who was said to be licentious and profligate. Bhai Desu Singh, who ruled over the area towards the west of Ghagghar stream, attacked Kaithal in 1767 and the town, after a brief fight, fell into the hands of the Sikh chieftain whose descendants, the Bhais of Kaithal, ranked among the most important and powerful Cis-Satluj Chiefs.¹ After the death of Bhai Udai Singh, the grandson of Bhai Desu Singh, the East India Company annexed the town and the estate in 1843. The Sikhs gave strong resistance in the skirmishes which took place at the time of actual possession of the town. Many British soldiers and officers were killed which fact is evidenced by a cemetery that still exists in the compound adjacent to the civil courts.

The principal buildings of antiquarian interest in the town are described below :

Tomb of Sheikh Shahab-ud-din.—Prince Shahab-ud-din Balkhi is said to have come from Balakh in Central Asia in 673 *Hijri* (A.D. 1274). He was slain in a battle at Kaithal and his grandson built the tomb to his memory. It is now in ruins.

Tomb of Shah Wilayat.—It is a small tomb restored probably in the time of Aurangzeb. The mosque in the enclosure is a much earlier structure. It is believed to have been built in the time of the Ghorī rulers.

Tomb and Mosque of Sheikh-Tayab.—The tomb of Sheikh-Tayab lies

1. "The Marathas of Kaithal relate a tradition according to which the Sikh Sardars of Kaithal used to offer *Chauth* to the Marathas. The Marathas once besieged the town of Kaithal on the Sikhs' refusal to make the payment in time. After that a large number of Marathas settled in Kaithal. Kaithal does indeed appear to have been once a centre of Maratha power in this area and in the town itself names of squares of spots are still named after the Marathas, e.g. Maratha Ghati, Maratha Chauk, Chhatar Mohalla, etc. At a distance of about half a kilometre from the town is a *sati* monument worshipped by the Punjab Marathas. In the town itself is a temple known locally as the Maratha Mandir which has a Hindi inscription on a small tablet of red stone. This temple, the Maratha Mohallas, and the *pakka* houses of some Maratha families are said to be the grateful tokens raised by the Rani of Kaithal, in recognition of the services rendered by some local Marathas, who restored to her, her property robbed by some thieves after a daring pursuit."

towards the south of the town near the railway line¹. The mosque was built by the Sheikh himself in the time of Emperor Akbar. It is said that Sheikh-Tayab belonged to a Hindu Kanungoian family and was later converted to Islam.

Tomb of Shah Kamal.—It is a masonry structure with dome, situated outside the town on the east towards Karnal. Shah Kamal is said to have come from Baghdad and the tomb was erected by his descendants.

Samadh Sitalpuri.—It is a shrine over the remains of Sitalpuri near *gaushala*. Sitalpuri was a friend of Shah Kamal. Generally the corpses of Hindus are first taken to this *samadh* before cremation.

Bidkiyar Lake.—This is situated to the east of the town. It was made in the time of Aurangzeb by Bidkiyar, a resident of Kaithal. Raja Udai Singh of the Bhai family also carried out some repairs during his time. It has extensive flights of steps on the town side only.

Asthan Anjani.—It is dedicated to Anjani (Anjana), the mother of Hanuman. Hanuman is said to have been born here. It is a mound and hence known as 'Anjni ka Tila'.

Old Fort.—It is said to have been built by Akbar. Raja Udai Singh altered and repaired it. The old fort has since been demolished and only some ruins on the banks of Bidkiyar Lake indicate its site.

Fort and Palace.—Desu Singh, the first ruler of Bhai family of Kaithal, built the fort of Kaithal and several other small *garhis*. After him, his son, Lal Singh, made additions to the fort of Kaithal; in fact, re-built it, for previously it was a mud structure. It was further enlarged and beautified in the time of Bhai Udai Singh. He also built a palace after the model of the house of General David Ochterlony at Karnal, but on a bigger scale, and a bridge over Bidkiyar Lake near the palace. The tahsil offices are located in the fort whereas the new palace built by Bhai Udai Singh serves as a rest house-cum-SubDivisional Magistrate's office and residence.

Kaithal is at present a flourishing town and trade centre. As the area around it produces cotton, many cotton factories have sprung up. Due to increase in the production of rice, a number of rice shellers have also been set up in the town.

1. The mosque ceased to be of 'national importance' from January 1, 1968 but has, since then been deemed to be a 'protected monument' under the Punjab Ancient and Historical Monuments and Archaeological Sites and Remains Act, 1964.

The places of public utility in the town include two police stations and a police post, a civil hospital, a post and telegraph office, a telephone exchange, a veterinary hospital, a canal rest house, a civil rest house, R. K. S. D. college, Indira Gandhi Mahila Maha Vidyalaya, Rural College of Education, Industrial Training Institute, two Government higher secondary schools (one for boys and the other for girls), two privately managed higher secondary schools for boys, a privately managed high school for girls, an industrial training school for girls, a rural artisan training centre, a rural development centre, municipal Library, Sudhar Sabha reading room and a *gaushala*. The Irrigation Department has constructed a colony for the offices of the Pehowa Irrigation Division and the residential quarters for its employees.

KALA AM (TAHSIL PANIPAT)

According to tradition, the site, 8 kilometres from Panipat and 42 kilometres from Karnal, where Sadashiv Rao Bhau commanded his Maratha forces during the Third Battle of Panipat was marked by a black mango tree (*Kala Am*) which has since disappeared. The dark colour of its foliage was probably the origin of the name black mango tree. Several villages around Panipat, namely Nimbdi (Nimri), Rajakheri, Suakheri (Siwalkheri), Kabulbagh, Ugrakheri, Ujah, Risalu and Siwah were also the scenes of severe fighting in this historic battle. It is, therefore, not surprising that Kala Am was long remembered by the people probably because of heavy fighting or some prominent incident of the battle that might have occurred here. However, it is definite that Bhau was in command in this segment of the battle.¹ At present, the site is marked by a brick pillar with an iron rod at the top and the whole structure is surrounded by an iron fence. The pillar bears an inscription in English and Urdu. The English version reads :

“This pillar marks the site of the black mango tree near which was fought the Third Battle of Panipat between Ahmed Shah Abdali and Maratha Confederacy in 1761.”

KARNAL (TAHSIL KARNAL)

Karnal, the headquarters of the district, is almost equi-distant from Delhi and Chandigarh. It lies on kilometres 118 of the Grand Trunk Road (N.H. 1) from Delhi to Ambala and at 29° 41' 16" north latitude and 76° 59' 13" east longitude. It is 122 kilometres from Chandigarh. Its population, which was 72,109 in 1961, increased to 92,784 in 1971.

1. Hari Ram Gupta, *Marathas and Panipat*, 1961, p. 282.

It stands on the high bluff of river Yamuna which once flowed in its immediate vicinity. The river later on shifted its course about 11 kilometres to the east. The main branch of the Western Jumna (Yamuna) Canal passes about 3 kilometres to the west of the town. It used to be to the east of the town ; but was re-aligned in 1885 as it obstructed the drainage and made the place insalubrious with swamps. Now the Augmentation Canal flows in the east of the town.

The town was formerly enclosed by a masonry wall, now in complete decay. It had 10 gates, of which Nawab, Kalandar and Ghazni Gates to the east and Jundla Gate to the west were the principal ones. Some of them still exist and serve as exits from the old town. To the west of the town lies an extensive bazaar known as Sadar Bazaar. It used to be the main shopping centre of the old cantonment and was known for the manufacture of tiles and flower pots. To the north about one and a half kilometres from the old town, lies the civil station where the public offices are situated on the site of the old cantonment.¹ After the Partition, new townships have sprung up towards the north-east and west.

The town is said to owe its foundation to Raja Karna, the champion of the Kauravas in the epic war of the *Mahabharata*. The tract in which it is situated is replete with ancient history, and almost every village and stream is connected with the legends of the great epic. In medieval times, however, the place appears to have lost its importance for, while towns like Panipat, Kaithal and Thanesar are mentioned by the early Arab Geographers, and these towns along with Samana and Sonipat (Sonepat) are frequently mentioned in the records of early writers, Karnal is first mentioned only towards the end of the Pathan period.² It was plundered in A.D. 1573 by Ibrahim Hussain Mirza in his revolt against Akbar and its neighbourhood was laid by Banda Bairagi in A.D. 1709. In A.D. 1739, it was the scene of the defeat of Muhammad Shah by Nadir Shah.

It continued like this until its importance grew in the time of Raja Gajpat Singh of Jind who after its capture in A.D. 1763 built the boundary wall and a fort and under whose rule the town increased considerably in size.

1. Immediately after the capture of the town in 1805, the British established a cantonment which was shifted to Ambala in 1841 on account of the unhealthiness from the swamps of the Western Jumna (Yamuna) Canal in its vicinity.
(*Karnal District Gazetteer*, 1892, p. 301).

2. *Karnal District Gazetteer*, 1892, p. 301.

But it fell on bad days again when his son, Bhag Singh, lost it to Marathas first in A.D. 1787 and finally in A.D. 1795.¹

At the time of its accession to the British territory in 1805, the town became a part of the Delhi area. It was included in the Panipat district created in 1824. In 1851, it was made a tahsil of the Panipat district with the tahsil headquarters at Gharaunda. In 1854, it became the headquarters of the district and in 1868 that of the tahsil also.

The principal places of antiquarian or historical interest in the town are given below :

Karna Tank.—The construction of this tank is ascribed to Raja Karna, the founder of Karnal. One Bhara Mall is said to have built a temple on the edge of the tank. This temple is held in much veneration by the Hindus.

Old Fort.—Originally constructed by Raja Gajpat Singh of Jind in about A.D. 1764, the fort has a remarkable history. It was seized from his son, Bhag Singh, by the Marathas, as already stated. They made it over to George Thomas and eventually it came into the possession of Gurdit Singh, Raja of Ladwa. It was captured from him by the British in A.D. 1805 and handed over by David Ochterlony to Muhamdi Khan Mandal, Nawab of Karnal. Four years² later, it was again taken over by the British in connection with the establishment of a cantonment. It was finally selected as a residence for Dost Mohammed Khan, Amir of Kabul, who stayed here for six months on his way to Calcutta. In A.D. 1862, the district school was moved into it from the city. In A.D. 1886, it was occupied for the use of the tahsil office and at present it forms the residence of Tahsildar.

Buali Shah Qalandar's Tomb.—It is a fine marble tomb situated just outside and to the east of the town.³ The tomb was built by Ghiyas-ud-din Tughluq in the memory of Buali Shah Qalandar, a celebrated saint, who is said to have resided for some time at Budha Khera⁴ and eventually at Karnal. Within the enclosure of the tomb, there is a mosque and a reservoir with a fountain erected by Aurangzeb. There is a kettle-drum balcony outside the tomb.

1. *Chiefs and Families of Note in the Punjab*, 1940, Vol. I, pp. 10-11.

2. *Ibid.* p. 31.

3. Buali Shah Qalandar was entombed at Panipat also. Its legend has been narrated in the description of Panipat town.

4. Here a brick wall, on which Buali Shah Qalandar rode 72 paces while going to pay homage to Sheikh Nizam-ud-din Auliya, is held in high esteem.

Miran Sahib's Tomb.—It is situated outside the town towards the south and alongside is a small mosque and a cemetery where many persons of Mandal family lie buried. Sayyid Muhammad *alias* Miran Sahib was a saint of considerable fame. A story is told that he led a large force to rescue a Brahman girl who had been carried off by a raja; the fight occurred where the railway station of Karnal now stands; the girl was recovered but some 500 warriors lost their lives while Miran Sahib escaped with the loss of one hand.¹ He died in 286 *Hijri* (A.D. 899) and his head was entombed at Karnal.

St. James' Church.—It was constructed in A.D. 1806, shortly after the establishment of the cantonment. After the shifting of the cantonment to Ambala in A.D. 1841, the building was dismantled and its material was removed to Ambala in A.D. 1843. The tower of the church, which is said to have been built by public subscription, was allowed to remain. It now stands as a land-mark alongside the Grand Trunk Road (N.H.1).

Bhara Mal's Serai.—This serai was built during the rule of Raja Gajpat Singh in A.D. 1768 by a banker named Bhara Mal. In A.D. 1906, this serai was conveyed by a free grant to the society for the propagation of Gospel and Cambridge Mission of Delhi for the erection of a hospital for women.

The serai is presently used as the office of Deputy Assistant Director General, Medical Stores, Government of India.

Makbara Naugaza.—The old shrine near the police station on the Grand Trunk Road (N.H.1) is said to have been erected in the memory of Naugaza Pir whose so many tombs are found in various parts of Haryana.²

Gurdwara Manji Sahib.—This is a sacred shrine of the Sikhs in Karnal. The place was sanctified by the visit of Guru Tegh Bahadur, the 9th Guru, on his way to Delhi where he had gone for the supreme sacrifice.

The public buildings and the places of utility in the town include a civil hospital, a T.B. clinic, Shree Sanatan Dharam Mahabir Dal Free Eye, Maternity and Family Planning Hospital, Shri Sewa Samiti Free Hospital, a post and telegraph office, a veterinary hospital, two police stations, a telephone exchange, Gandhi Memorial Library, Jatton Mohalla Library, Police Library, Arya Samaj Library, Manav Sewa Sangh Library, Partap Library, Jain Library, an industrial

1. C.H. Buck, *The Annals of Karnal*, 1914, p. 33.

2. The tombs of Naugaza Pir are also found at Nisang and Gharaunda in this district and at Hajar in the Rohtak district.

training institute, a Government industrial school for girls, a ladies' industrial home, D.A.V. College for women, D.A.V. College of Education for Women, Dayal Singh College, two Government higher secondary schools—one for boys and the other for girls, two Government high schools—one for boys and the other for girls, two privately managed higher secondary schools for boys, six privately managed high schools—two for boys and four for girls, St. Theresa's convent, the National Dairy Research Institute, new rest house (of the National Dairy Institute), a canal rest house, a P.W.D. rest house and a Zila Parishad dak bungalow.

KUNJPURA (TAHSIL KARNAL)

Kunjpura, an estate, founded by Nijabat Khan, a Pathan soldier under the Mughal emperors, sometimes before the incursion of Nadir Shah in 1738, lies at 29° 43' north latitude and 77° 04' 52" east longitude, and is 10 kilometres towards east of Karnal. Its population in 1971 was 5,811. The place was once a municipal town but the municipality was later abolished due to decrease in population. It has again gained importance with the establishment of a Sainik School. The places of public utility include a Government higher secondary school, a civil dispensary, a veterinary dispensary and Sainik School.

The estate of Kunjpura has had a chequered history. It became an evacuee property when the Muslim Nawab shifted to Pakistan in 1947.¹

KURUKSHETRA

Kurukshetra is a railway station on the main Delhi-Ambala railway line. It is about 160 kilometres north of Delhi, 39 kilometres north of Karnal and 40 kilometres south of Ambala. It is at a distance of about 5 kilometres from Pipli, a small village but an important road junction on the National Highway No. 1 popularly called the Grand Trunk Road. There is only a small bazaar outside the Kurukshetra railway station. This small locality is also linked by regular bus services with all the important towns. The actual habitation, however, is in Thanesar town at a distance of about 3 kilometres.

The small locality is the starting point of a great pilgrimage for millions of Hindus from all over the country who visit the land of Kurukshetra, the venue of the Mahabharata war and the birth place of the *Bhagwad Gita*, for its holy places. There are no hotels to accommodate the large influx of people, but accommodation is available in local Dharmshalas, viz., Birla Dharmshala,

1. For an historical background of Kunjpura, see Chapter on 'History'.

Aggarwal Dharmsala, Dharmsala Baba Kali Kamli Wala and Bharat Sewashram Dharmsala. Accommodation is also available with special permission from the concerned Departments in the P.W.D. Rest House at Pipli¹ and the Canal Rest House at Jyotisar. The Haryana Government's Tourist Bureau at Kurukshetra caters to the convenience of tourists and pilgrims.²

Mythologically, the name Kurukshetra applies to a circuit of about 80 miles (128 kilometres) which includes a large number of holy places, temples and tanks, connected with the ancient Indian traditions and the Mahabharata war.³ It covers a wide area with the present Panipat and north-west corner of the Jind district in the south and eastern part of the Patiala district in the west, Saraswati and Yamuna rivers as its northern and eastern boundaries respectively. According to Manu, it lay between the old sacred rivers Saraswati and Drishadwati and was known as Brahma-varta.

In the very first verse of the *Bhagvad-Gita*, Kurukshetra is described as Dharmakshetra, the field of righteousness.⁴ It is also known as Brahmakshetra, the field of Brahma, the Creator. Nardak is another name for Kurukshetra, probably derived from nirdukh, without sorrow.

1. The State Government has also set up a modern tourist complex at Pipli. For more details see Chapter on 'Communications'.

2. The State Government has also set up an autonomous organisation called by the name of Kurukshetra Development Board which is to undertake the overall integrated development of Kurukshetra including its landscaping, renovation of historical places, sacred religious tanks, provision of facilities to pilgrims and tourists. For more details about this Board, Chapter on 'Public Life and Voluntary Organisations' may be referred to.

3. "According to popular belief the number of places of pilgrimage in it is 360, but no complete list of them is given. Its circuit is variously said to be 20, 40 and 48 kos, and these accounts would make it include the town of Jind, which is 65 miles (104.6 kilometres) distant from Thanesar. This account General Cunningham rejects as a late invention of interested Brahmans, wishing to carry favour with the *Sikh Raja* of Jind, by bringing his capital within the range of the holy circuit; and he concludes by accepting as the probable boundary a line drawn from Ratan Jaksh on the Sarassuti, westwards to Pihowa, from Pihowa southwards to beyond Pundri, from thence eastward to Naraina, and from Naraina northward again to Ratan Jaksh. This circuit is as nearly as possible 80 miles (128 kilometres), or 40 kos; and within its limits lie all the famous places connected with the history of the Pandus. It may, therefore, be accepted as approximately correct."

(*Gazetteer of the Ambala District*, 1883-84, p. 15.)

Note : Ratan Jaksh : village Ratgal on Kurukshetra-Pipli Road.

4. धर्मक्षेत्रे कुरुक्षेत्रे समवेता युयुत्सवः

मामकाः पाण्डवाश्चैव किमकुर्वत संजय ॥ (भगवद्गीता 1/2)

The very name Kurukshetra conjures up the imagination of every Hindu and reminds him of the ancient Indian past when the Aryans inhabited the land at the dawn of civilisation. *Upanishads* and *Puranas* also originated in this land.

Saraswati is the river par excellence and occurs most frequently in the *Rigveda*. Kurukshetra was the abode of sage Vyasa, the legendary compiler of the *Vedas* and *Puranas*. It was an important centre of learning and civilisation. In fact, it is the cradle of Indian civilisation and culture. Around this country took shape a civilisation which is one of the longest in the course of world history and surpasses in its continuity the ancient civilisation of Egypt, Sumer, Babylon, Akkad and Assyria which have long ceased to exist.

Yajurveda describes it as the place of sacrifices of *devas*, i.e. the gods. It is also said to be associated with all the three gods of Hindu trinity. It was the *Brahma vedi*, i.e. the sacrificial altar of Brahma. It was here that Brahma, the Creator, was believed to have practised penance and performed a number of sacrifices so that he might prove equal to the task of creation. It is the seat of creation. Prajapati is said to have created the world and the four Varnas at Prithudaka, i.e. Pehowa. It was in Kurukshetra that Lord Vishnu, the preserver of the universe, prayed to have Lakshmi as his spouse. Shiva, the god of destruction, was said to have acquired the power to destroy the demon, Tripura, by bathing for six months in the Saraswati. He became Sthanu by staying in Kurukshetra. Thanesar is the Sthanu-tirtha. Kurukshetra came to be called Samantapanchaka when Parasurama made five pools of the blood of Kshatriyas in revenge for his father's murder. According to tradition these were subsequently turned into holy pools of water by the blessings of his *pitras*. It came to be called Kurukshetra, the field of Kuru, when king Kuru, the ancestor of the Kauravas and Pandavas, who was a royal sage of great prowess, reclaimed this land with a golden plough for many years.¹ the *Puranic* story about king Kuru is very interesting and runs thus :

“King Kuru selected this land on the bank of the sacred river Saraswati for spiritual culture and cultivation of eight-fold virtues. The king came here on his golden chariot and utilised its gold for making a plough for cultivation. He took loan of the bull of Shiva and a buffalo of Yama and started ploughing the area. Indra, the king of gods, came and asked Kuru as to what he was doing. The king replied that he was preparing the land for growing the eight-fold virtues of religious austerity (*tapas*), truth, forgiveness, kindness, Purity, Charity, yoga and continence (*Brahmcharya*). Indra again asked the king as to where he would

1. *Vishnu Purana*, IV, 19,

get the seed of these virtues. The king replied that the seed was in his possession. At this the god Indra laughed at him and went away. After the king had cultivated the land for several days, god Vishnu appeared before the king and asked him as to what he was doing. The king replied in the same manner as he had done when questioned by Indra. God Vishnu asked the king Kuru to give him the seed and said that he would sow it for him. At this king Kuru put forward his right arm and the same was cut into thousand pieces with the Chakra of Vishnu and sown in the field. In the same way king Kuru's left arm, his two legs and then his head were offered by him to god Vishnu for sowing. This act of the king pleased god Vishnu very much and he blessed him. God Indra also appeared at this stage and told the king that he was very much pleased with his sacrifices and wished that he may ask for any boon from him. The king upon this begged of him two boons : one, that this land would ever remain a holy land named after himself, and the other, that any one dying here would go to heaven irrespective of his sins and virtues."

The story briefly related above is generally interpreted to mean that King Kuru established at Kurukshetra an extensive institution for the moral and spiritual culture of humanity as a whole. His object was to lay down a code of conduct for the people, stressing the importance of intense manual labour and righteousness.

Kurukshetra further shot into prominence as the battle field of Mahabharata and as the birth place of holy *Gita*. The great 18-day battle of Mahabharata was fought here in the ancient past between Kauravas and Pandavas for upholding the cause of *dharma*. It was a 'war between good and evil' in which the Pandavas were victorious. *Bhagvad-Gita*, the Song Celestial, is the divine message which Lord Krishna delivered to Arjuna on the eve of the great war when he saw the latter wavering from his duty. It epitomises all that is the best and noblest in the Hindu philosophy of life. Jyotisar, near Thanesar, marks the site where it was delivered.

Kurukshetra is mentioned a great deal in ancient literature. A flourishing country of the Kurus, it was the most sacred region of the Dvapara age according to the *Matsya Purana*,¹ and one of the sixteen *Mahajanapadas* of

1. *Matsya Purana*, 106, 57 ; Kurma, 1.37.

Jambudvipa.¹ In the *Mahabharata* period, it was known as *Bahu dhanyika* (land of plenty). It was the land of lakes and lotus beds. Manu indirectly praises the prowess of the people of Kurukshetra. The Girnar Rock Inscription of about A.D. 150 describes them as difficult to be controlled. Bana describes it as the land of the brave in the eyes of the warriors. The place was visited by Buddha and appears to have been favoured by his masterly discourses.² Kurukshetra also finds mention in Panini's *Ashtadhyayi*. It was also visited by nine out of the ten Sikh Gurus. Only the second Guru Angad Dev did not visit this place. The place where Guru Nanak stayed during his sojourn at Kurukshetra is well known as Gurdwara Sidhbatī on a mound near the pumping station across the Kurukshetra Tank. The *Gurdwara* dedicated to Guru Hargobind, the sixth *guru*, stands near Sannihit tank. A *Gurdwara* near the Sthaneshwar tank marks the spot sanctified by the visit of the ninth Guru Tegh Bahadur. On the main bank of the Kurukshetra tank, stands the Gurdwara Rajghat built in the memory of the visit of the tenth Guru Gobind Singh, who also visited Jyotisar.

This region saw the rise and fall of many an empire through centuries. Sons of the soil fought invaders in the battle field of this sacred land from time to time and their exploits fill the pages of history. The period of King Harsha was a golden age. The Chinese traveller, Yuan Chwang (Hiuen Tsang), who visited it in the seventh century (A.D. 629 to 645) said :

“In that country of gaiety and plenty, the people were good natured, hospitable and magnanimous, devoted to their duties and shunning confusion of castes and cadres.”

Bana, the great Sanskrit poet, describes the capital, Thanesar, in glowing terms. Kurukshetra has been a symbol of sanctity and holiness for centuries. Traditionally, its dust blown by wind or by the feet of the pilgrims would take a sinner to *paramagati* (complete communion with God). All who die here attain *moksha* (deliverance from taking birth again and again). The very thought of going and living there would rid person of all his sins. According to the *Mahabharata*, Kurukshetra is the *tirtha* par excellence in all the three worlds.

1. Jambudvipa, according to *Puranas*, is one of the seven divisions of the world which includes the whole of India.

2. The Buddhist literature refers to two villages (of Kuru realm) which were said to have been visited by Lord Buddha himself. But these places lay between the Ganga and the Yamuna. (R.C. Agrawala, *Kurukshetra in later Sanskrit Literature—Indian Historical Quarterly*, March 1955.)

Hindus have always considered it their good fortune to visit Kurukshetra. The orthodox belief is that charity performed here bears manifold rewards. Because of its great mythological traditions, the region abounds in *tirthas* or holy spots associated with great events or personalities of the past, legends or the cults of Siva and Sun gods. Unfortunately, after Harsha, the region did not enjoy the peace for long time. It became a battlefield of all foreign invaders and subject to their continuous ravages which laid waste its splendid culture. The sweep of iron hand of time played havoc with this holiest of holy regions. While many of the *tirthas* have totally disappeared with the passage of time, quite a number of these continued to survive in a dilapidated condition. Still so sacred is the region that the people continued to worship it as a holy land. It presents scenes of intense religious fervour when lakhs of people from all parts of India representing all shades of Hinduism gather at the Kurukshetra tanks on the occasion of the solar eclipse and other fairs. A bath in the Brahmasar or the Kurukshetra Tank at the time of the solar eclipse is said to bestow upon the bather the benefit of a thousand *Ashwamedha Yajnas*.¹ Kurukshetra remained neglected for development purposes till 1968 except making adequate arrangements at the time of the solar eclipse fair. The Haryana Government then decided to revive the ancient glory of Kurukshetra and constituted the Kurukshetra Development Board to undertake an integrated and planned development of the region. An account of the activities of this board has been given in the Chapter on Public Life and Voluntary Social Service Organisations.

The foremost among the Kurukshetra *tirthas* are Brahmasar or Kurukshetra Tank, Sannihit Tank, Sthanesvara Tank, Jyotisar, Ban-ganga, Chandra-Kupa and Nabhi Kamal. Other important *tirthas* are located in Thanesar (Sthanuvata), Pehowa (Prithudaka), Kaithal (Kapisthala), Pharal (Phalgu), Pundri (Pundrika), Pindara (Pind-Tarak), Ram Rai (Ram Hrada), Kalayat and Safidon (Sarpadevi),¹ and many important villages. The last mentioned four places are in the Jind district. However, the Kurukshetra *tirthas* are described below :

Kurukshetra Tank.—Kurukshetra or Brahmasar tank is the centre of interest for the pilgrims. It is 1,442 yards (1,318.6 metres) in length and 700 yards (640 metres) in breadth. This place is said to be the first altar of Brahma's *yajna*. The tank is believed to have been excavated first by King Kuru long before the epic battle of the *Mahabharata*. For the reasons already given, the tank is considered very sacred. In ancient times, there were long flights of steps on all the four sides of the tank. But in the course of time, the

1. *Yamana Purana*, Ch. 22, Sh. 14.

steps on the southern side and part of the eastern side completely disappeared. Ghats on the northern and western sides remained in good condition. The long line of trees on the northern bank, a small island, and another big island in the middle of the tank enhance its beauty and make it attractive to the visitors.¹ There are temples and places of historical interest in these islands. The small island is linked with the *Shravan Nath Math* (an old *ashram* of *sanyasis*) by a bridge and the bigger island is linked by another bridge which runs from the middle of the northern bank straight to the southern bank dividing the tank into two parts. There are mango trees on these islands. Ruins of some structures standing on the bigger island are said to be of a small castle of Emperor Aurangzeb, who posted armed soldiers to collect taxes from the pilgrims taking bath in the tank or taking sacred water from the tank. The rates of taxes are said to have been a rupee for a pot of water and five rupees for a bath. Pilgrims found to evade payment of taxes were punished.

In 1948, part of the ashes of Mahatma Gandhi were immersed in this tank.

There are *mathas*, temples and dharmshalas on the northern bank of the tank. Of these, the dharmshalas of Baba Kali-Kamli Wala on the north-east corner and Gita Temple of the Birlas on the north-west corner deserve special mention. In the centre of the northern bank, there are Vyas Gaudiya Math of Bengalee Sadhus and Gita Bhavan. There is also a sacred place for the Sikhs on the north-west end of this tank. It is associated with the visit of Guru Gobind Singh on the occasion of a solar eclipse.

Sannihit Tank.—This tank is smaller as compared to Kurukshetra Tank and has a length of about 500 yards (457 metres) and a breadth of 150 yards (137 metres). It looks like a small lake of glistening water in which are reflected the domes and spires of nearby temples. The most famous are the temples dedicated to Sri Dhruv Narain and Sri Laxmi Narain. There are ghats on its three sides only. It is situated at a mile's distance from Kurukshetra Railway Station on Pehowa Road. Pilgrims are led first to this holy spot at the time of the solar eclipse. Sannihit means assembly of the entire range of *tirthas*. It is said that on every *amavas* particularly on a *Somavati Amavas* (an *amavas*

1. The tank has been renovated in the first phase at a cost of Rs. one crore and fifty lakhs under the aegis of the Kurukshetra Development Board. It has been cleaned and a bathing ghat to accommodate ten lakh pilgrims has been constructed. On May 17, 1973, the Satluj waters from the Gobind Sagar flowing in the Narwana Branch of the Bhakra Canal System were released into the holy tank in the presence of a large number of holy men from all over India. Inaugural ceremony was performed on Jun 28, 1973

falling on a Monday), all *tirthas* assemble at Sannihit Tank. The performance of *shraddha* here on the day of solar eclipse is said to give the benefit of thousand *Ashvamedh* sacrifices.

Sthanesvara Tank.—Meaning the place of God, it is a sacred tank in front of a temple of Lord Shiva. It is at a short distance from Thanesar town, which itself derives its name from the tank. The tank was once famous for the healing properties of its water. It is said that a few drops of water of this tank cured leprosy of an ancient king named Vena. The Pandavas are also said to have worshipped here.

Jyotisar.—It is another very important place of pilgrimage. This tank is about 500 feet x 100 feet (152 metres x 30.4 metres). Five kilometres west of Thanesar, it is situated on the Kurukshetra-Pehowa Road. The old bed of the sacred river Saraswati lies near Jyotisar village in the shape of a narrow canal. At Jyotisar, no relic is seen except a banyan tree which is said to have been there for more than 5,000 years. Lord Krishna is believed to have delivered his message of the *Bhagvad-Gita* to Arjuna at this place¹. Pilgrims generally visit this place first before setting on pilgrimage to Badrinath and Kedarnath. *Adi Shankracharya* also visited this place on way to Badrinath and Kedarnath.

Ban-ganga.—This holy tank is about 3 miles (5 kilometres) from Kurukshetra Tank towards south and is connected by an unmetalled road. It is said that Bhishma Pitamaha lay here on the bed of arrows and felt thirsty. He asked Arjuna to quench his thirst. Arjuna pierced the earth with his powerful arrow and the water of the Ganga gushed forth in the form of a fountain which subsequently turned into a tank.

Chandra-kupa.—A small *tirtha* in the bigger island inside the Kurukshetra Tank, it is said to be one of the oldest sacred wells. Tradition has it that in ancient times the water of this well used to change into milk at the time of solar eclipse. There is a temple by the side of the well, where Yudhishtira is said to have built a victory pillar after successful culmination of the war.

1. No reference of this spot is found in any of the holy books. Even the *Mahabharata* does not refer to any spot where *Bhagvad-Gita*, the Song Celestial, was delivered. The only reference found in the *Mahabharata* is that Arjuna requested Lord Krishna to stop his chariot at a place from where he could see both the armies and it was there that Lord Krishna delivered the gospel of *Bhagvad-Gita*. It is believed that the banyan tree at Jyotisar stands there as the only relic of that celestial scene. A marble *Mandap* was constructed under the tree by the Kurukshetra Restoration Society and was inaugurated in November, 1926. A marble chariot with the idols of Krishna and Arjuna also now stands under the tree.

The pillar does not exist now. The fortress built by Emperor Aurangzeb was on this well which he got filled up with lead. The Marathas got it dismantled and restored the *tirtha*.

Nabhi Kamal.—It is a sacred tank adjacent to Thanesar town. It was here that Lord Brahma is said to have been born out of a lotus which grew on the nabhi (navel) of Lord Vishnu¹. People generally visit the place in the month of Sravan or Chaitra.

Gita Bhavan.—Built in 1921-22 by the Kurukshetra Restoration Society at a cost of several lakhs of rupees, the Bhavan has a library, which besides other religious books, contains translations of the *Bhagvad-Gita* in many Indian and foreign languages.

Gita Mandir.—Popularly known as Birla Mandir, it was built by Jugal Kishore Birla in the mid-fifties of the present century. Situated on Kurukshetra-Pehowa Road and adjoining the holy Brahmasar Tank, it is a beautiful temple, all made of marble from within. It is one of the premier temples of this region and also a specimen of Hindu architecture in modern times. The main deity of the temple is Lord Krishna, whose life-size marble statue is very impressive. Full text of the *Bhagwad-Gita*, the Song Celestial, is engraved on the walls around the main temple. Carvings of various scenes from Hindu mythology are configured on the walls, pillars and entablatures which are the highlights of the grandeur of the temple. In the main hall, the portraits of Sage Ved Vyas, Mahatma Buddha, Guru Nanak, Saint Tulsidas, Guru Gobind Singh and Saint Ravi Dass are incised on the walls along with their sayings. Another attraction is a large-size all marble chariot driven by four horses and depicting Lord Krishna delivering the message of the *Gita* to Arjuna. One couplet from each of the eighteen chapters of the *Gita* has been inscribed on all the four sides of this chariot. Janmashtmi festival is celebrated here with great enthusiasm. A dharmasala with modern amenities provides accommodation to the visiting devotees.

Apart from its association with holy places dating back to most ancient times, the name Kurukshetra has also been applied to an institution of modern learning namely the Kurukshetra University. This University, at a distance of about 4 kilometres from the Kurukshetra railway station and about 2 kilometres from the Thanesar town, was set up in 1956 as a Sanskrit University and

1. According to mythology, this tank is the source of the universe. The legend goes that Lord Vishnu formless, was in a trance at the site when a lotus stalk sprouted from his navel. From the lotus came the four-faced Brahma chanting the *Vedas*. It was out of the limbs of Brahma that the universe came into existence.

has since then become an important centre of academic and cultural activities. The University Campus is beautifully laid out and has developed into a miniature town having all the modern amenities. Besides the thirty-two teaching departments, a Government College, a College of Education and a Regional Engineering College are located there.¹ Other places of public utility include a Police post, a post and telegraph office, a telephone exchange, referral hospital, Vidya Vihar Gurukul and Gita Bhawan Library.²

LADWA (TAHSIL THANESAR)

It is a small town 37 kilometres north of Karnal and 20 kilometres east of Kurukshetra. It lies at 29° 59' 33" north latitude and 77° 02' 42" east longitude. Its population which was 8,259 in 1961 increased to 10,666 in 1971.

As stated in the Chapter on History, the town and the neighbourhood belonged to a Sikh Misaldar and were confiscated by the British in 1846 as the Raja had fought on the side of the Sikhs in the First Sikh War.³ There is an old tank and a Devi Temple on the outskirts of the town. A fair is held annually which lasts for a week. With the Green Revolution, the place has become commercially very important and a new Mandi has been established there.

The places of public utility include a Government high school, a P.W.D. rest house, a civil dispensary, a post and telegraph office, a telephone exchange, a municipal library, a police station and a veterinary hospital.

NILU KHERI (NILO KHERI) (TAHSIL KARNAL)

The township of Nilu Kheri (Nilo Kheri) lies at 18 kilometres north of Karnal at 29° 50' 05" north latitude and 76° 55' 10" east longitude. The 1961 Census gives its population as 8,035. It increased to 9,357 in 1971.

This township was set up after 1947 and was designed to be a home for a few of the millions of displaced persons from Pakistan who would care to settle there. The settlement of Nilu Kheri (Nilo Kheri) was a new experiment in self-help by the community. It was a happy coincidence that the pilot project, which grew into the great Community Development Programme in India, was started at Nilu Kheri (Nilo Kheri) in 1952.

The Punjab Government offered land along the Grand Trunk Road (N.H.1), to the Government of India for the new township that was visualised

1. For more details see chapter on 'Education and Culture'.

2. The name Kurukshetra has also been given to a new district carved out of the Karnal district on January 23, 1973.

3. For details see Chapter on 'History'.

at the time to be an agro-industrial community. The site was an evacuee land measuring about 550 acres (223 hectares) a low-lying unculturable swamp where rain water from a large catchment flowed in and stayed for a major part of the year. A jungle of stunted *dhak* and bushy undergrowth was cleared by co-operative effort and the work of rehabilitating displaced persons started in 1948. Its beginnings were humble, a tented township with 3 kw generator to impart a feeling of security. Now it is a flourishing little oasis of brick and mortar, humming with life and activity.

The last few years have seen the construction of residential houses, industrial sheds and buildings, the completion of electric fittings and water-supply arrangements. The houses and shops were allotted to displaced persons under the provisions of the Displaced persons Compensation and Rehabilitation Act, 1954.

The Kisan Basti (Farmers' Colony) was established for the settlement of some families of agriculturists. Each agriculturist was allotted 6 acres (2.4 hectares) of land on hire-purchase basis. An industrial estate comprising 14 sheds was constructed by the Industries Department.

The township has the following training centres to train various functionaries for the Community Development Programme :—

1. The State Community Development Training Centre¹
2. The Extension Education Institute
3. The Integrated Training Centre for Extension Officers (Industries)

Other places of public utility in the town include Haryana Polytechnic, a Government higher secondary school, a Government basic school, a Government nursery and kindergarten school, a primary health centre, a veterinary hospital, a printing press (Government of India), a Vijnan Mandir, a Government guest house, a telephone exchange, a post and telegraph office, a police post, a public Library and Extension Education Centre Library.

PANIPAT (TAHSIL PANIPAT)

Panipat, the headquarters of the tahsil of the same name, is 34 kilometres south of Karnal on the Grand Trunk Road. It lies at 29° 23' 33" north latitude and 76° 58' 38" east longitude. Its population which was 67,026 in 1961, increased to 87,981 in 1971.

1. It was shifted to Hissar in 1969.

Owing to its strategic location on the highroad from Firozpur and Sirhind to Delhi, Panipat has been the scene of some of the most historic battles in the Indian history. As far back as the Mahabharata, the town was one of the well known five *patas*¹ or *prasthas* which were demanded by Yudhishtira from Duryodhana. Later, the Kauravas and Pandavas engaged themselves in their cataclysmic struggle not far away from the town. A distinctive class of pottery known as the painted Gray Ware,² has been excavated at Panipat in recent years. It has also revealed the presence of subsequent ceramics of early historic times.³

It is thus beyond doubt that the town is of great antiquity. In the days gone by, it was described by the French traveller, Jacquemont, as the largest city except Delhi which he saw in Northern India. Since the very dawn of recorded times, the entire tract embracing Panipat, Kurukshetra and Tirawari (Taraori), has been the cockpit of Indian history. In the 16th and 18th centuries, Panipat stood witness to three of the most decisive battles. The first was that of Babar, the founder of Mughal Empire, against Ibrahim Lodi, the pathan King of Delhi, in A.D. 1526 ; the second, of his grandson, the young Akbar, out to wrest his father's shaky dominion from the Delhi ruler's Hindu general, Hemchandra, thirty years later in 1556 ; and the third of the Marathas and Ahmad Shah Abdali in 1761.

The town is situated near the old bank of river Yamuna upon a high mound composed of the debris of centuries.⁴ On all sides Panipat rises gently upward towards an old fort which is the highest point. Surrounded by an old

1. Panipat, Sonipat, Inderpat (Delhi), Baghpat and Talpat. (Hari Ram Gupta, *Marathas and Panipat*, 1961, p. 176 fn.)

2. It would seem that the authors of this had made their appearance in the Ghaggar Valley round about 1200 B.C.—B.B. Lal, *Ancient India*, No. 9 (1953), p. 97.

3. Y.D. Sharma, *Exploration of Historical Sites, Ancient India*, No. 9 (1953), p. 141.

B.B. Lal mentions that "on the north western side where the Gandhi Memorial Library and Power House are located, there is a fairly vertical section wherein it was observed that the Paints Gray Ware lay immediately over the natural soil and the Northern Black Polished Ware higher up in the mound."

4. Tradition goes that the Yamuna in the times of Buali Shah Qalandar flowed under the town. Buali Qalandar prayed so constantly that it became laborious to get water to wash his hands each time ; so he stood in the Yamuna. After standing there for 7 years the fishes had gnawed his legs, and he was so stiff that he could hardly move. So he asked the Yamuna to step back seven paces. She, in her hurry to oblige the saint, went back seven *kos*, and there she is now. (*Karnal District Gazetteer*, 1918, p. 76)

wall pierced by 15 gates of which Salarganj, Shah Walayat and Madhoganj are the principal ones, Panipat has its suburbs stretching in all directions except in the east. The town with its narrow and crooked streets is crossed by two main bazaars. Shah Rah, the Imperial Mughal Road (known as Grand Trunk Road and barely grazing along the western side of the town) passed through the town. And even today, its *kos minars*, south and north of Panipat, stand as mute witnesses to the once great highway of men and commerce. Besides, there was the Shah Nahar flowing to the west at a distance of nearly 7 kilometres from the highway.

The principal places of antiquity in the town are as follows :—

Dargah Qalandar Shah.—It is the principal monument of the town, 700 years old, within the city walls. It was erected except for the touch-stone pillars of its *dalan*, by Khizir Khan and Shadi Khan, sons of Ala-ud-din Khalji. Buali Shah Qalandar was the son of Salar Faqir-ud-din and is supposed to have born in A.D. 1190. The saint died at the age of 122 years in A.D. 1312. The touch-stone pillars presently existing in the shrine were erected by one Razaquallah Khan son of Nawab Muqarrab Khan, a *hakim* in the service of Emperor Akbar¹. During the Uprising in 1857, the people of Panipat gathered in Dargah Qalandar Shah. Trouble was apprehended but before it could assume a serious form, it was suppressed. The endowment attached to the shrine was confiscated by the Government as a punishment.

In the same enclosure, there are the tombs of Hakim Muqarrab Khan and Khwaja Altaf Hussain 'Hali', the renowned Urdu poet.

Grave of Ibrahim Lodi.—Ibrahim Lodi was slain in the First Battle of Panipat. His tomb lay between the tahsil and the city with an inscribed platform in his memory. The tomb was destroyed when the Grand Trunk Road was constructed. Presently, a masonry platform along with an inscription stands in the name of Emperor Babar. The inscription has two gross mistakes in it. Babar's name is Zahir-ud-din and not Ghiyas-ud-din as mentioned in it. Secondly, the battle was fought in 932 *Hijri* and not 934 *Hijri*. In any case the grave of Ibrahim was not on this spot.

Ruins of Mosque in Kabuli Bagh.—The mosque was built after the First Battle of Panipat to commemorate the victory over Ibrahim Lodi. Some years later when Humayun defeated Salim Shah, he added a masonry platform to it and called it Chabutra-a-Fateh Mubarik, bearing an inscription, 934 *Hijri* (A.D. 1527).

1. *Karnal District Gazetteer*, 1892, p. 305.

Devi Temple.—The temple has a large tank adjoining it and is an old structure. In the same enclosure, there is a Shiva temple, originally a Maratha construction as is indicated by its Marathi-Persian inscription. It was built in 1765 by a Maratha, Mangal Raghunath son of Ram Chandrapant who had remained in Panipat after the historic battle.

During the period of Muslim supremacy, the town became a centre of Sufi saints, Muslim scholars, theologians and Mughal stipendiaries. Khwaja Altaf Hussain 'Hali', the famous Urdu poet, belonged to Panipat.

The town was once known for the manufacture of copper vessels and also glass used for ornamenting women's dresses. At present, it is the foremost industrial town in the district and is well known for its handloom products. Its furnishing fabrics, blankets and other woollen goods are sent to other States as well as exported to other countries.

The places of public utility in the town include a civil hospital, an E.S.I. hospital, a post and telegraph office, a telephone exchange, a veterinary hospital, two police stations, an industrial training institute, a Government industrial school for boys, a Government industrial school for girls, a drugget centre, S.D. College, I.B. Bharatri College for Women, Arya College, a Government higher secondary school for girls, a Government high school for girls, three privately-managed higher secondary schools for boys, four privately-managed high schools—one for boys and three for girls, a P.W.D. rest house, Government institute for blind, Gandhi Municipal Library, Kamalia Bradari Library and a *gaushala*.

The old mosques, *imambaras* and *idgahs* are gradually falling into ruins. New residential colonies, viz. model town, 4-marla housing colony and mud hut colony, were constructed after the partition.

PEHOWA (TAHSIL KAITHAL)

This small town in the Kaithal tahsil, 52 kilometres north-west of Karnal and 27 kilometres west of Thanesar lies at 29° 58' 45" north latitude and 76° 34' 55" east longitude. The population of the town was 6,159 according to 1961 Census. It increased to 11,366 in 1971.

The place derives its name from Prithu who was called the first king. On the death of Vena,¹ his son Prithu performed the usual funeral ceremonies and for 12 days after the cremation, he sat on the bank of the Saraswati offering

1. The story of cure of Vena's leprosy by bathing in the tank on the Saraswati is told in *Vishnu Purana*.

water to all visitors. The place, therefore, came to be known as Prithudaka or Prithu's pool and the city which he afterwards built on the spot was called by the same name.

It is an ancient place of pilgrimage. It has already been mentioned that it is believed that Prajapati created the world and the four *varnas* of the Hindus at this place. The town contains two specially famous tanks, sacred one to Brahma and the other to the goddess Saraswati. A big fair is held on the latter tank every year in March or April (*Amavas* of Chaitra) after the tradition of Prithu and is attended by more than 50,000 persons. The fair lasts for 3 days and people offer *pindas* (balls of rice and flour) for the salvation of their departed kith and kin.

The place is of a great antiquity. This is proved by the discovery of large size bricks which are 18 inches by $2\frac{1}{2}$ inches to 3 inches. Two inscriptions of the time of Bhoja and his son, Mahendrapala, kings of Kanauj, and fragments of mediaeval sculptures and Painted Grey Ware have been found here. The inscription of the time of Mahendrapala records the erection of a triple temple to Vishnu by three brothers. There are two mounds, the larger of which is covered with modern houses and the other about 30 to 40 feet in height, is known as Tila of Vishvamitra. The mound seems to mark the site of some old temple, partly constructed in stone. No trace of the original temple remains, the modern shrine seems to have been built in the last century. Recently some pieces of sculpture of Vishnu temple have been discovered here, but it cannot be precisely said that these belong to Vishnu temple referred to in the inscription. Anyhow, it is doubtless that they pertain to some prominent Vishnu temple of the Pratihara period raised in that city.¹ Half a mile higher-up on the bank of the stream stood another temple, which from the existing position of its doorway appears to have been dedicated to Vishnu.

An old serai built along the old Imperial Road still exists in a dilapidated condition. A palace built by Bhai Udai Singh of Kaithal is in good condition and is used as the civil rest house.

Pehowa is famous for Shivji Ka Mandir and Karttikeya Ka Mandir. Unlike the other temples dedicated to Shiva, this Shiva temple has no linga, instead it has a *panch-mukhi* idol of Shiva which is said to be the only one of its type in the whole of India. The temple of Karttikeya was built by Marathas during their period of supremacy.

1. Buddha Prakash, *Glimpses of Haryana*, 1967, p. 21.

Recently with the clearance of forests and extension of irrigation facilities, Pehowa has emerged as an important market. It is now connected by metalled roads with Ambala, Thanesar, Kaithal and Gula (Guhla). A canal colony was constructed after the Partition by the Irrigation Department.

The places of public utility include a police station, a primary health centre, a veterinary hospital, a post and telegraph office, a telephone exchange, a Government higher secondary school for girls, a Government high school for boys, a civil rest house and a municipal library.

PHARAL (TAHSIL KAITHAL)

Pharal village lies 9 kilometres north of Pundri and 46 kilometres west of Karnal. There is a holy tank adjoining the village where Rishi Phalgu is said to have meditated. The Kauravas and the Pandavas performed here the funeral rites of the warriors who had fallen in the war. A big fair is held here for 15 days whenever a *somavati amavas* (moonless night falling on Monday) occurs during the *shraddhas* (dark half of Asuj). The place does not possess the usual town facilities.

PUNDRI (TAHSIL KAITHAL)

It is a small town situated 18 kilometres east of Kaithal and 45 kilometres west of Karnal and lies at 29° 45' 38" north latitude and 76° 33' 37" east longitude. Its population of 7,660 in 1961 increased to 9,107 in 1971.

The town once flourished on the bank of an extensive tank known as Pundrak Tank, said to have been constructed during the period of Mahabharata.¹ The town derives its name from the tank which is now in ruins except for a *ghat* consisting of a few steps. The town is enclosed by a wall and has four gates; Pundrak Gate in the north, Kaithal Gate to the west, Pai Gate to the south and Habri Gate to the east.

The places of public utility include a police station, a police post, a post and telegraph office, a telephone exchange, a Government high school, a privately-managed high school for boys, a P.W.D. dak bungalow, a municipal library and a civil dispensary. The town is important as a grain market. A big fair is held in the month of Chaitra.

SHAHABAD (SHAHBAD) (TAHSIL THANESAR)

It is a town in the Thanesar tahsil and is situated on the Grand Trunk Road (N.H. 1), on the banks of Markanda river. It is also a railway station

1. *Karnal District Gazetteer*, 1918, p. 222.

with the name of Shahabad Markanda on the Delhi-Karnal Ambala Railway line. It lies at 30° 10' 04" north latitude and 76° 52' 17" east longitude, 55 kilometres north of Karnal. Its population, which was 18,975 in 1961, increased to 21,500 in 1971.

It was founded in A.D. 1192 after the defeat of the Rajputs in the Battle of Tirawari (Taraori), by the followers of Shahab-ud-din Ghuri, the first Muslim conqueror of Delhi. It came into existence with the reward of 52,000 *bighas* of revenue-free land to the Muslim soldiers for their services. They were also granted the revenue of several neighbouring villages. The site selected was on the Markanda at a strategic point along the highroad to Delhi and for purposes of administration was attached to the province of Sirhind.

In 1525, the town assisted Ibrahim Lodi and in the following year, it was pillaged by Babar as a punishment. Its strategic position was recognised in the later Mughal period and considerable extensions were made in the town. When the Sikhs came into power during the 18th century, Banda Bairagi (Banda Bahadur) attacked the town which surrendered to him after vain appeals to the ruler of Delhi for help. The Sikhs divided Shahabad in seven patts, the leading Sardars of each patti distributing a rough justice. In 1802, the British suzerainty was established over the town, though the Sardars of Shahabad retained administrative powers. With the annexation of the Punjab, the British assumed the reigns of the Government and only *jagirs* were granted to the Sardars.

The historical buildings in the town include the Royal Serai and mosques of the Pathan period with dark squat domes. The finest Pathan mosque which shows the marks of *Sikh* bullets was converted into a gurdwara known as Mastgarh¹. The serai is one of the oldest buildings in the town. It was, however, protected in the reign of Shah Jahan by a fortified wall like that of Red Fort at Delhi. It was the residence of some Mughal officials. It is probable that the serai was maintained as a strategic landmark lying along the main road to Delhi.

A *mandi* known as Kahan Chand Mandi was constructed in 1923 on the outskirts of the town near the railway station. This *mandi* could not flourish and is now serving as a residential colony. The present *mandi* at a new site along the Grand Trunk Road (N. H. 1) was constructed in October, 1960.

1. Mastgarh is said to be a derivation from *masit* or *masjid*. According to another version, it was taken over by the Sikhs who used it as a place for taking *bhang* and wine. As such it came to be known as *mastgarh*, the place where people got intoxicated.

The places of public utility in the town include a police station and a police post, a civil hospital, a post and telegraph office, a telephone exchange, a veterinary hospital, a P. W. D. rest house, Arya Kanya Mahavidyalya, a Government higher secondary school for boys, a privately-managed higher secondary school for boys and 3 privately-managed high schools—one for boys and two for girls, a municipal library and a *gaushala*.

SIWAN (TAHSIL GULA)

It is a village 10 kilometres north of Kaithal on the Kaithal-Chika-Patiala Road and 73 kilometres west of Karnal, and lies at 29° 53' 15" north latitude and 76° 21' 13" east longitude. Its population was 6,779 in 1961 and increased to 10,204 in 1971.

Siwan is said to be a contraction of the word Seoban or Sitaban, the forest home of Sita. There is an old shrine of Sita, built in the ordinary form of a Hindu temple. It is of bricks, but the curious feature is the elaborate ornamentation which covers the whole shrine, the pattern of which is formed by deep lines in the individual bricks which seem to have been made before they were burned so that the forms they were to take must have been separately fixed for each brick. A large part of the shrine was pulled down and thrown into the tank by some iconoclast Muslim emperor. Though the shrine was rebuilt with the same bricks, yet the original pattern could not be achieved. The shrine is said to mark the spot where the earth swallowed up Sita in answer to her appeal for a proof of her chastity. There is also an ancient tank with wells on the four corners, which is supposed to be as old as the shrine itself.

A Trivikrama image of Lord Vishnu in sculpture, attended by gods and goddesses and having seven *rishis* as reliefs was recovered here and is now worshipped in the Kashipuri temple at Kaithal.¹ Another image, apparently of Gupta period, of a three faced Vishnu, recovered from this place is also worshipped in the same temple.

The places of public utility include a post and telegraph office, a Government higher secondary school and a primary health centre.

TIRAWARI (TARAORI) (TAHSIL KARNAL)

It is a village 16 kilometres north of Karnal and lies at 29° 48' 04" north latitude and 76° 55' 45" east longitude. Its population was 7,523 in 1961 and increased to 8,835 in 1971.

1. R.C. Majumdar, *The History and Culture of Indian People, Volume IV, The Age of Imperial Kanauj*, 1964, p. 336.

It was here that in A.D. 1191, the invading army of Muhammad Ghuri was defeated by the united Hindu army under Prithviraj Chahamana (Chauhan). The following year Muhammad Ghuri invaded again and defeated Prithviraj's forces. Prince Azam, son of Aurangzeb, in whose memory the place was named Azamabad, was born here and till late it was called as such by some people. A wall around the town now in a dilapidated condition, a mosque and a tank said to have been the works of Aurangzeb, are still in existence. Besides, there is a well-preserved specimen of the royal serai, located on old Shah Rah which ran through Tirawari (Taraori). The serai, appears to have been used by the Sikhs as a fort. At present, this has been converted into a colony for displaced persons from Pakistan.

The places of public utility include a Government high school, a post and telegraph office, a telephone exchange and a civil dispensary.

THANESAR (TAHSIL THANESAR)

Thanesar is the most sacred place of Hindu pilgrimage in the region known as Kurukshetra described earlier. It lies at 29° 58' 15" north latitude and 76° 50' east longitude, 39 kilometres north of Karnal and 40 kilometres south of Ambala. It is the headquarters¹ of the tahsil of the same name and its population, which was 16,828 in 1961, increased to 29,555 in 1971. It is about eight kilometres from Pipli, a village on the Grand Trunk Road (N.H.1.). It is also a railway station on Kurukshetra-Narwana branch section.

The name of the locality was originally Sthanvisvara which was known to the Chinese traveller, Yuan Chwang (Hiuen Tsang) as *Sa-ta-ni-shi-fa-lo* and to the Greek geographer, Ptolemy, as *Batan-Kaisera*². The name Sthanvisvara is derived by Cunningham either from the *Sthana* (abode) of *Iswara* (or *Mahadeo*), or from the junction of his name as *Sthanu* and *Iswara*, or from *Sthanu* and *Sar*, a lake.

Thanesar remained a great seat of Vedic learning from very ancient times as the centre of Brahmvarta in which the Aryan culture flourished. The Mahabharata War fought in its close proximity sanctified a large number of spots associated with it. Later, in Buddhist times, many monasteries were constructed in and around it.

1. With the creation of Kurukshetra as a separate district on January 23, 1973, it has also been made headquarters of the new district.

2. It would perhaps be read *Spttan-aisara*, for the Sanskrit Sthanvisvara.

Apart from its religious associations, Thanesar gained great political importance as the capital from which Harsha-var dhana started to build his large empire. The book *Harsha-charita* by his court poet, Bana, describes the glory of the Sthanvisvara (Thanesar) in the following words :—

“Sages entitled it a hermitage, courtesans a lovers’ retreat, actors a concert hall, foes the city of death, seekers of wealth the land of the philosopher’s stone, sons of the sword the soil of heroes, aspirants to knowledge the preceptor’s home, singers the Gandharva city, scientists the great Artificer’s temple, merchants the land of profit, bards the gaming house, good men the gathering of the virtuous, refugees the cage of adamant, libertines the Rogue’s Meet, wayfarers the reward of their good deeds, treasure seekers the mine, quietists the Buddhist monastery, lovers the Apsaras’ city, troubadours the festival congress, Brahmanas the stream of wealth.”¹

In the 7th century A.D., Yuan Chwang (Hiuen Tsang) mentioned the kingdom of Thanesar as 7,000 *li* in circuit and its capital as about 20 *li* in circuit. The Chinese traveller testified to the existence of three Buddhist monasteries with more than 700 professed Buddhists, 100 Deva temples and sectaries of various kinds in great numbers. He further stated that to the north-west of Thanesar, 4 to 5 *li*, a *stupa* about 200 feet high built by *Ashoka*, existed. Its bricks were of yellowish red colour, very bright and shining and from the *stupa* a brilliant light was frequently seen. Harsha-var dhana was then the ruler and it was a prosperous city.² The glory of Thanesar faded to some extent with the transfer of the capital to Kanauj. When in A.D. 648, a Chinese ambassador was sent to the court of Harsha, he found that the Senapati had usurped his kingdom and the dynasty had become extinct.

Having remained as a great religious and political centre, Thanesar became a target of one of the early invasions of Sultan Mahmud. He plundered Thanesar in A.D. 1014 and destroyed its rich temples and palaces and carried away as much gold as he could. But not long after in A.D. 1044, Mahipal, Raja of Delhi, recaptured it from the Muslims. Its subsequent history is chequered. It remained a desolated place. It was again in the time of Sikan-dar Lodi that the city was invaded and sacked. It again picked up its importance and its old glory was revived in Akbar’s time only to suffer once more during

1. *Harsha-charita* of Banabhatta ed. Jivananda, p. 268.

2. Yuan Chwang failed to refer to the house of Puspabhuties of the place.

the reign of Aurangzeb. On the rise of the Sikh power, Thanesar fell into the hands of Mith Singh, who left his territories to his nephews. On the extinction of the family in 1850, the town lapsed to the British Government. During their rule, it remained in a neglected condition. Some efforts were made by the Kurukshetra Restoration Society to carry out repairs to certain tanks and temples.

An account of religious places has already been given under Kurukshetra. The places of historical interest connected with the Medieval Period comprise an ancient fort and mounds, Sheikh Chehli's Tomb and Madrasah, Pathar Masjid and Chini Masjid. These are described below :

Ancient Fort and Mounds.—There exists a ruined fort measuring 1,200 square feet at the top, a suburb called Bahari and the town, all situated on three different ancient mounds. Thus three mounds together occupy a space of about 3 miles (5 kilometres), which closely agrees with the 20 *li* of Yuan Chwang.¹ Tradition assigns the construction of the Thanesar fort to Raja Dilip, a descendant of Kuru. Spooner states that it was most probably founded by Harsha-varadhana. The chief reason for this inference apart from other considerations, is the fact that all visible structures in the fort are composed of bricks measuring $14'' \times 8\frac{1}{2}'' \times 2\frac{1}{2}''$. The fort is said to have 52 towers or bastions some of which still exist. The number of the gates is not ascertainable on account of the later renovations of the fort during the Muslim and the Sikh periods. Besides, there is another important mound situated about $\frac{1}{4}$ th of a mile ($\frac{2}{5}$ th of a kilometre) to the north-west of Thanesar, in which Cunningham recognised the remains of a stupa built by Asoka which was said to have contained the relics of the Buddha and was standing to a height of about 300 feet (91 metres) when Yuan Chwang visited it. The modern town of Thanesar still stands on an ancient mound.

Sheikh Chehli's Tomb and Madrasah.—This tomb along with madrasah stands at the north-east corner of the fort overlooking the serai built by Sher Shah Suri. It is an octagonal building of white marble, 18 feet (5.5 metres) on each side and about 44 feet (13.5 metres) in diameter, crowned by a marble dome, and surrounded by a marble-paved courtyard. Because of its lofty position and white mass of marble, the tomb is conspicuous from a long distance. The pear-shaped dome and flower marble lattice work declare it to be of a modern date. The people attribute this shrine to a *Pir* (spiritual

1. *Annual Report of the Archaeological Survey of India, 1922-23*, pp. 87-91.

adviser) of Dara Shikoh. There is a difference of opinion about the name of the *Pir*, some calling him Abdur-Rahim, some Abdul-Karim and others Abd-ul-Razak, but he is more familiarly known by the name of Sheikh Chehli. Cunningham also assigned it to the time of Dara Shikoh, about A.D. 1650.

The madrasah is a stone building, with a deep arcade of nine openings on each side. The building was constructed entirely with the spoils of Hindu temples, the arcades being supported on plain Hindu pillars. Nothing is known of the date of the madrasah, but from its evident connection with the tomb, it must have been built at the same time as a part of the religious establishment of the saint's shrine.

Pathar Masjid and Chini Masjid.—Pathar Masjid is a small building being only 37 feet (11 metres) long by $11\frac{1}{2}$ feet ($3\frac{1}{2}$ metres) broad inside, but is remarkable for its *minars* which are attached to the ends of the back wall instead of the front wall, as is usual. Like Qutab Minar, these *minars* are fluted below with alternatively round angular flutes. The Masjid (mosque) is assigned to the time of Firuz Shah Tughluq or to the end of the 14th century.¹

The Chini Masjid is situated in the town. It has two short stout minars, which together with its walls must once have been covered with glazed tiles. Most of the tiles have gone, but as the remaining tiles are of small size, and each piece of one uniform colour, Cunningham assigned the building with much probability to the reign of Aurangzeb.²

The places of public utility in the town include a police station and a police post, a post and telegraph office, a veterinary hospital, a civil dispensary, a Government higher secondary school for boys, a Government high school for girls, two privately-managed high schools, Shelter Hut, municipal library and a *guashala*.

PLACES OF ARCHAEOLOGICAL INTEREST

A few more sites of archaeological interest which have not been mentioned in the foregoing pages but have yielded various objects of antiquarian interest and a distinctive class of pottery known as the Painted Gray Ware generally associated with the Aryans (C 1100-500 B. C.) are described below :

Raja Karna ka Kila.—It is a small mound about 3 miles (5 kilometres)

1. Alexander Cunningham, *Annual Report of the Archaeological Survey of India*, Volume II, 1871, p. 222.

2. *Ibid.*, p. 222.

to the west and south-west of Thanesar. It is about 500 square feet (46.5 square metres) at the top, 800 square feet (74 square metres) at the base with a height of 30 to 40 feet (9 to 12 metres). Sherds of Painted Gray Ware and some other objects such as a flesh-rubber, a terracotta reel, a mould for printing cloth, a human head, a double inkpot, a hollow terracotta rattle, a flattened bronze object appearing to be a late derivative of a celt with crescentric circle, an earthen *chati* (pot) having a line of *trisula* and wheel carved on it, one earthen pitcher ornamented round the shoulder and some pieces of glazed pottery of the Muslim period have been found here. There is also a large step-well of the Muslim period.

Excavations show the size of bricks as 14 to 14½"x9 to 9½"x2½ to 3". Spooner mentions¹ about the discovery of two wedge-shaped bricks about 2 or 3 feet above the virgin soil in one of the trenches excavated here. He also informs that such bricks had been used in the most ancient times.

Theh Polar.—The ruins situated on the south bank of the Saraswati about 5 miles (8 kilometres) above Siwan or 11 miles (18 kilometres) from Kaithal are said to mark the site of an ancient village destroyed before the Mahabharata War. Tradition ascribes the place as an abode of Paulastya—an ancestor of Ravana.² During the excavations, the place yielded about 465 antiquities consisting of coins, clay-seals, weights, pottery, copper vessels and other minor finds.

Close to the mound are foundations of the bridge said to have been built across the Saraswati in the Muslim period. It was this bridge by which Timur crossed the Saraswati during his invasion of India. The bridge was destroyed by the Marathas and a new masonry regulator known as the Polar regulator, was constructed near the old bridge in 1907.

Asthapura.—It lies to the west of Thanesar and to the south of the Aujas ghat and marks the place where the bodies of the persons slain in the Mahabharata war were cremated. Yuan Chwang visiting this place in the 7th century A.D. also bears testimony to this fact. Cunningham excavated the mound³

1. *Annual Report of the Archaeological Survey of India, 1922-23*, p. 88.

2. *Annual Report of the Archaeological Survey of India, 1930-34*, p. 143.

The tradition does not seem to be reliable ; the site was still occupied only a few hundred years ago and many finds date back to the 3rd and 4th centuries A.D., long after the war of Mahabharata could have taken place. (H.L. Srivastva, 'Excavations of Theh Polar, District Karnal', *Annual Report of the Archaeological Survey of India, 1933-34*.)

3. Alexander Cunningham, *Annual Report of the Archaeological Survey of India, 1878-79*.

which measures about 700 feet by 500 feet (213 metres by 152 metres) and found "an extensive platform of unbaked bricks still 364 feet (111 metres) in length", besides many remains of walls and fragments of terracotta sculptures.

Bhor (Sarsa).—About 8 miles (13 kolometres) to the west of Thanesar towards Pehowa lies the Bhuristrava Tank. Tradition ascribes the place to be connected with the treacherous murder of Bhuristrava by Arjuna during the Mahabharata war. Bhuristrava was son of Somadatta, Raja of Varanasi. The village is named Bhor after him. This small village is situated on an ancient mound. The houses are built of old large size bricks of $12\frac{3}{4}" \times 9\frac{1}{2}" \times 2"$.

Besides, Painted Grey Wares have also been found from Bahola, Daulatpur, Jaurasi Khurd, Kheri Khera, Morthali, Teora and Urnai and Red Polished Ware from Kohand.¹

OTHER LEGENDARY PLACES

Places connected with scenes of many incidents narrated in the *Mahabharata* are still pointed out by the people, and the whole area of Kurukshetra is full of *tirthas* and holy tanks. The local legends are far too numerous and lengthy; however, some of the more important legendary places not described earlier, along with the legends associated with them are mentioned here.

Bastali (about 26 kilometres west of Karnal on the Karnal-Kaithal Road).-- It is said that it was at this village that sage Vyasa, the author of the epic of *Mahabharata*, lived; hence Vyasasthali or Basthali or Bastali. The Ganga flowed underground into his well to save him the trouble of going to the river for a bath, bringing with it his *lota* and loin cloth, which he had left in the river, to convince him that the water was really from the Ganga.

Bahlolpur (about 10 to 11 kilometres west of Karnal).—Here in the Parasir Tank, the warrior Duryodhana hid himself till Krishna's jeers brought him unwillingly out to put up a fight. He was later on killed near Gumthala Kheri (near Pehowa).

1. Painted Grey Wares are assigned to the beginning of the 1st millenium B.C.

POLYMETRIC TABLE
Kilometres

1	KARNAL	O KARNAL	
	AMIN	29 O AMIN	
3	ASANDH	45 74 O ASANDH	
	GHARAUNDA	18 47 43 O GHARAUNDA	
	GULA	82 73 73 100 O GULA	
	INDRI	24 39 69 42 90 O INDRI	
	KAITHAL	63 64 42 81 31 87 O KAITHAL	
8	KALA AM	42 71 51 24 124 66 93 O KALA AM	
9	KUNJ PURA	10 39 55 28 92 34 73 52 O KUNJ PURA	
10	KURUKSHETRA	39 16 84 57 57 33 48 81 49 O KURUKSHETRA	
11	LADWA	37 26 82 55 77 13 68 79 47 20 O LADWA	
12	NILU KHERI	18 11 63 36 76 35 56 60 28 21 31 O NILU KHERI	
13	PANIPAT	34 63 43 16 116 58 85 8 44 73 71 52 O PANIPAT	
14	PEHOWA	52 43 64 70 30 60 28 94 62 27 47 46 86 O PEHOWA	
15	PHARAL	46 51 47 64 47 69 27 88 56 31 51 39 80 17 O PHARAL	
16	PUNDRI	45 60 38 63 49 69 18 87 55 40 60 48 79 26 9 O PUNDRI	
17	SHAHABAD	55 32 100 73 77 40 73 97 65 26 27 37 89 47 57 66 O SHAHABAD	
18	SIWAN	73 74 52 91 21 97 10 103 83 58 78 66 95 38 37 28 83 O SIWAN	
19	TIRAWARI	16 19 61 34 84 33 64 58 26 29 39 8 50 54 48 57 45 74 O TIRAWARI	
20	THANESAR	39 16 84 57 57 33 48 81 49 0 20 21 73 27 31 40 26 58 29 O THANESAR	



सत्यमेव जयते

APPENDIX

Table	Contents	Page
I	Normals and Extremes of Rainfall	.. 532
II	Frequency of Annual Rainfall (1901—1950)	.. 534
III	Normals of Temperature and Relative Humidity	.. 534
IV	Mean Wind Speed	.. 535
V	Special Weather Phenomena	.. 535
VI	Tahsilwise distribution of Population	.. 536
VII	Variation of Population in the Towns during 1951—61	.. 537
VIII	Fairs and Festivals (other than those given in the text)	.. 538
IX	Sowing and harvesting of Kharif and Rabi Crops	.. 547
X	Area under Principal Crops	.. 549
XI	Yield per Hectare of Principal Crops	.. 550
XII	Production of Principal Crops	.. 551
XIII	Demonstration and Seed Farms	.. 552
XIV	Subsidies/Loans advanced to the Agriculturists	.. 553
XV	Regional Artificial Insemination Centres and Stockmen Sub-Centres under the Intensive Cattle Development Block, Karnal (Central Project)	.. 554
XVI	Regional Artificial Insemination Centres and Stockmen Centres under the Intensive Cattle Development Project, Pehowa at Thanesar (State Project)	.. 556
XVII	Veterinary Hospitals and Dispensaries	.. 557
XVIII	Damage caused to Crops and Houses by Heavy Rains and Floods	.. 559
XIX	Industrial Statistics (Small-Scale and Cottage Industries)	.. 560
XX	Agricultural Cooperative Credit Societies	.. 564
XXI	Non-Agricultural Cooperative Credit Societies	.. 565
XXII	Working of the Karnal Cooperative Bank Ltd., Karnal	.. 566
XXIII	Joint Stock Banks	.. 567
XXIV	Conversion Factors	.. 568

Table	Contents	Page
XXV	Roads maintained by the Public Works Department	.. 559
XXVI	Roads maintained by the Zila Parishad	.. 577
XXVII	Number of Registered Vehicles	.. 578
XXVIII	Railway Traffic	.. 580
XXIX	Dak Bungalows, Inspection Bungalows, Rest Houses and Tourists Houses	.. 582
XXX	List of Post Offices	.. 584
XXXI	<i>Panchayats</i> , Villages and Population in Blocks	.. 591
XXXII	Courses conducted at the Extension Education Institute, Nilu Kheri (Nilo Kehri)	.. 592
XXXIII	Incidence of Land Revenue	.. 593
XXXIV	Income from Fixed and Fluctuating Land Revenue and Remission	.. 594
XXXV	Offences against Local and Special Laws	.. 595
XXXVI	Strength of the District Police (1970)	.. 596
XXXVII	Cases tried by Civil Courts	.. 598
XXXVIII	Income and Expenditure of Municipal Committees	.. 600
XXXIX	Judicial work done by <i>Panchayats</i>	.. 602
XL	Development work done by <i>Panchayats</i>	.. 604
XLI	Blocks and the Number of <i>Panchayats</i> and their Panches	.. 606
XLII	Tahsilwise Number of Schools	.. 608
XLIII	Courses conducted at the National Dairy Research Institute, Karnal and Southern Regional Station, Bangalore	.. 610
XLIV	Allopathic Hospitals and Dispensaries	.. 611
XLV	Deaths caused by different Diseases, Fevers, etc.	.. 615
XLVI	Incidence of Smallpox and Preventive Measures taken for its Eradication	616
XLVII	D.D.T. Spraying	.. 617
XLVIII	UNICEF Milk Feeding Centres	.. 618
XLIX	Prevention of Adulteration in Foodstuffs	.. 618
L	Important Labour Laws	.. 619
LI	Registered Trade Unions	.. 622

Table	Contents	Page
LII	Strikes by the Workers	.. 624
LIII	Constituencies and the number of valid votes polled for election to Lok Sabha in the Karnal district during the First General Elections, 1952	.. 624
LIV	Constituencies and the number of votes polled for election to Vidhan Sabha in the Karnal district during the First General Elections, 1952	.. 625
LV	Constituencies and the number of valid votes polled for election to Lok Sabha in the Karnal district during the Second General Elections, 1957	.. 626
LVI	Constituencies of the Karnal district for election to Vidhan Sabha, the number of valid votes polled, etc., during the Second General Elections, 1957	.. 627
LVII	Constituencies and the number of valid votes polled in the Karnal district for election to Lok Sabha during the Third General Elections, 1962	.. 628
LVIII	Constituencies of the Karnal district for election to Vidhan Sabha, the number of valid votes polled, etc., during the Third General Elections, 1962	.. 629
LIX	Constituencies and the number of valid votes polled for election to Lok Sabha in the Karnal district during the Fourth General Elections, 1967	.. 631
LX	Constituencies of the Karnal district for election to Vidhan Sabha, the number of valid votes polled, etc., during the Fourth General Elections, 1967	.. 632
LXI	Constituencies of the Karnal district for election to Vidhan Sabha, the number of valid votes polled, etc., during the Mid-Term Elections, 1968	.. 634
LXII	Constituencies and the number of valid votes polled for election to Lok Sabha in the Karnal district during the Mid-Term Elections, 1971	.. 636
LXIII	Local Dailies and Periodicals	.. 637
LXIV	Dailies and Periodicals published outside the Karnal district	.. 641

TABLE
Normals and Extremes

Station	Number of years of data	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
Panipat	50 a	22.3	21.6	14.0	10.2	11.9	52.1	172.5	162.6
	b	2.0	2.1	1.3	0.8	1.2	3.0	8.0	7.0
Karnal	50 a	32.0	31.0	15.5	11.7	12.2	61.5	214.6	184.7
	b	2.4	2.5	1.5	1.1	1.2	3.2	9.1	7.8
Rajaund	50 a	14.7	16.5	7.6	6.9	7.6	34.8	118.6	105.4
	b	1.2	1.1	0.7	0.6	0.7	1.6	4.9	4.3
Kaithal	50 a	22.9	22.6	16.3	11.2	12.5	50.3	142.7	129.5
	b	2.0	1.9	1.4	1.0	1.0	2.6	7.4	6.6
Gula (Guhla)	50 a	24.6	23.1	17.5	12.9	10.9	47.0	133.3	132.6
	b	2.0	1.9	1.3	0.9	0.9	2.5	7.1	6.7
Thanesar	50 a	27.9	32.3	16.5	11.4	8.6	56.6	186.2	149.1
	b	2.3	2.4	1.4	1.0	0.9	3.3	8.3	7.4
Karnal (District)	a	24.1	24.5	14.6	10.7	10.6	50.4	161.3	144.0
	b	2.0	2.0	1.3	0.9	1.0	2.7	7.5	6.6

(a) Normal rainfall in mm.

(b) Average number of rainy days (days with rain of 2.5 mm. or more)

-1

of Rainfall

Sept.	Oct.	Nov.	Dec.	Annual	Highest annual rainfall as % of normal year**	Lowest annual rainfall as % of normal year**	Heaviest rainfall in 24 hours*	
							Amount (mm)	Date
114.3	11.2	2.8	8.9	604.4	178 (1933)	33 (1939)	254.0	1933, Sept. 19
4.3	0.6	0.2	0.9	31.4				
130.3	12.9	4.1	10.4	720.9	167 (1935)	49 (1929)	269.7	1952, Aug. 21
4.4	0.7	0.2	1.0	35.1				
73.7	9.1	1.0	4.8	400.7	207 (1909)	00 (1949)	228.6	1887, July 29
2.2	0.4	0.1	0.4	18.2				
100.1	10.2	2.0	9.1	529.4	187 (1942)	43 (1938)	233.7	1880, June 29
4.1	0.6	0.2	0.9	29.7				
91.7	11.2	2.0	8.4	515.2	198 (1917)	43 (1938)	160.8	1949, July 14
4.1	0.6	0.3	0.9	29.2				
125.5	13.2	2.8	11.2	641.3	195 (1942)	51 (1918)	207.0	1900, July 16
4.5	0.5	0.2	1.0	33.2				
105.9	11.3	2.5	8.8	568.7	171 (1942)	46 (1938)		
3.9	0.6	0.2	0.9	29.6				

* Based on all available data up to 1959

** Years given in brackets

TABLE II
Frequency of Annual Rainfall (1901—1950)

Range in mm.	Number of years	Range in mm.	Number of years
201—300	1	601—700	12
301—400	6	701—800	3
401—500	9	801—900	3
501—600	15	901—1000	1

TABLE III
Normals of Temperature and Relative Humidity

Month	Mean daily maxi- mum temp- erature	Mean daily mini- mum temp- erature	Highest maximum ever recorded			Lowest minimum ever recorded			Relative humidity	
									0830*	1730*
									%	%
	C	C	C	Date		C	Date			
January	20.2	7.0	27.2	1952	Jan. 24	0.0	1964	Jan. 31	85	51
February	24.0	9.2	31.7	1960	Feb. 16	1.5	1964	Feb. 3	73	38
March	29.4	14.1	36.7	1953	Mar. 29	7.0	1957	Mar. 6	64	33
April	35.7	19.3	42.8	1952	Apr. 25	11.2	1957	Apr. 1	45	21
May	39.7	24.2	46.0	1962	May 28	16.8	1960	May 8	41	19
June	39.6	26.6	45.6	1958	June 17	18.0	1962	June 18	55	34
July	34.9	25.7	43.9	1959	July 5	19.0	1960	July 12	79	62
August	32.9	25.0	42.0	1962	Aug. 5	18.4	1960	Aug. 26	85	71
September	33.3	23.6	38.3	1951	Sept. 6	17.3	1957	Sept. 26	79	61
October	31.5	17.3	39.3	1957	Oct. 2	11.1	1957	Oct. 30	73	46
November	27.2	11.9	34.4	1953	Nov. 4	4.5	1962	Nov. 30	64	41
December	22.8	8.4	27.8	1959	Dec. 15	0.1	1964	Dec. 12	79	47
Annual	30.9	17.7							69	44

*Hours Indian Standard Time

TABLE IV
Mean Wind Speed

(kilometres per hour)

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
3.4	4.3	4.2	3.7	4.8	4.0	2.6	2.1	2.7	2.3	2.7	2.0	3.2

TABLE V
Special Weather Phenomena

Mean Number of days* with	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
Thunder	1.1	1.0	0.2	1.3	1.7	3	2	3	3	0.7	0.3	0	17
Hail	0	0.1	0.3	0	0	0	0	0	0	0.1	0.1	0	0.6
Dust- storm	0	0.5	0.5	0.6	3	1.8	0.2	0.1	0	0	0	0	7
Squall	0	0	0	0	0	0	0	0	0	0	0	0	0
Fog	0.2	0.4	0.1	0	0	0	0	0	0.1	0.1	0.3	0.4	1.6

*Number of days 2 and above are given in whole numbers.

TABLE VI
Tahsilwise distribution of Population

Tahsil	Rural (inhabited villages)	Urban (towns)	Population			Percent- age of total tahsil population
			Total	Males	Females	
Karnal	395	—	3,49,671	1,89,095	1,60,576	79.4
	—	Karnal	72,109	38,415	33,694	16.4
		Gharaunda	10,496	5,638	4,858	2.4
		Nilu Kheri (Nilo Kheri)	8,035	4,625	3,410	1.8
			90,640	48,678	41,962	20.6
		(Total for tahsil)	4,40,311	2,37,773	2,02,538	100.0
Panipat	168	—	2,14,917	1,16,180	98,737	76.2
	—	Panipat	67,026	35,566	31,460	23.8
		(Total for tahsil)	2,81,943	1,51,746	1,30,197	100.0
Thanesar	409	—	2,19,838	1,17,928	1,01,910	81.7
	—	Thanesar	16,828	9,223	7,605	6.3
		Shahabad (Shahbad)	18,975	10,165	8,810	7.1
		Ladwa	8,259	4,417	3,842	3.0
		Radaur	5,155	2,752	2,403	1.9
			49,217	26,557	22,660	18.3
		(Total for tahsil)	2,69,055	1,44,485	1,24,570	100.0
Kaithal	378	—	4,50,412	2,44,576	2,05,836	90.2
	—	Kaithal	34,890	18,657	16,233	7.0
		Pundri	7,660	4,137	3,523	1.6
		Pehowa	6,159	3,395	2,764	1.2
			48,709	26,189	22,520	9.8
		(Total for tahsil)	4,99,121	2,70,765	2,28,356	100.0
Total for district :						
	(Rural) (1,350)	—	12,34,838	6,67,779	5,67,059	82.8
	—	Urban (11)	2,55,592	1,36,990	1,18,602	17.2
Grand Total :			14,90,430	8,04,769	6,85,661	100.0

Note: The figures for Gula tahsil are included in the Kaithal tahsil since during 1961 Census, Gula as a sub-tahsil was part of the Kaithal tahsil.

TABLE VII
Variation of Population in the Towns during 1951—61

Name of the town	Population		Variation	
	1951	1961	Number	Percentage
Karnal	57,966	71,883	(+)12,073	(+)23.3
Karnal Civil Lines	1,844			
Panipat	54,981	66,737	(+)11,756	(+)21.4
Kaithal	25,732	34,885	(+)6,463	(+)22.7
Kaithal Mandi	2,690			
Shahabad (Shahbad)	17,301	18,968	(+)1,667	(+)9.6
Thanesar	11,273	16,747	(+)5,474	(+)48.6
Gharaunda	8,632	10,505	(+)1,873	(+)21.7
Ladwa	6,237	8,247	(+)2,010	(+)30.0
Nilu Kheri (Nilo Kheri) Township	6,287	8,032	(+)1,745	(+)27.8
Pundri	6,552	7,656	(+)1,104	(+)16.8
Pehowa	..	6,161		
Radaur	3,837	5,151	(+)1,314	(+)34.3
Total :	2,03,312	2,54,973	(+)51,661	(+)25.4

सत्यमेव जयते

TABLE VIII

Fairs and Festivals (other than those given in the text)

Name of village/ town	Fair/ festival	Date and duration	Significance and legend	Mode of obser- vance and entertainments	Castes/ communi- ties
1	2	3	4	5	6
Kaithal Tahsil					
1 Ladana Baba H.B. 8	Mela Smadh Baba Rajpuri	Asoj Sudi 11 (Septem- ber-Octo- ber) One day	Religious Dedicated to saint Rajpuri who lived in the days of Bhai Udham Singh and was worshipped by the people like a god	Obeisance is paid at the <i>smadh</i> of the saint	All
2 Patti Khot H.B. 22	Ganga Gadli	Bhadon 14 (August- September) One day	Religious Dedicated to saint Kasturi Gir who was held in high esteem	A holy dip in the tank ; obeisance at the <i>smadh</i> of the saint ; recital of holy books Wrestling ; folk songs	Hindus
3 Patti Kayath Seth H.B. 24	Mela Baba Rajpuri	(October) One day	Religious		All
4 Kultaran H.B. 27	Mela Kul- taran Tirth	Every Amavas that falls on a Monday One day	Religious A <i>sadhu</i> died and his relatives were taking his body to Pehowa. On the way the <i>sadhu</i> opened his eyes and directed the persons to bury him at that very spot. Later a <i>smadh</i> was raised at that place and the fair began to be held	A holy bath ; in recitations from <i>Ramayana</i> and <i>Gita</i> ; performance of havan yajna Wrestling	Hindus
5 Keorak H.B. 33	Mela Baba Rajpuri	Phagan (February- March) One day	Dedicated to saint Rajpuri	A holy dip in the tank ; offerings and prayers at the <i>smadh</i> of the saint. Wrestling, <i>kabaddi</i>	Hindus
6 Salwan H.B. 95	(a) Mela Devi	Chet Sudi 8 (March- April) Asoj Sudi 8 (September- October) One day	Religious Dedicated to goddess	A holy bath in the tank ; Worship of the goddess ; Women sing songs in praise of the goddess ; first hair-cutting	Hindus

TABLE VIII—(Contd.)


Name of village/ town	Fair/ festival	Date and duration	Significance and legend	Mode of obser- vance and entertainments	Castes/ communi- ties
1	2	3	4	5	6
				ceremony of children per- formed Wrestling	
	(b) Chhatttri fair, or Mela Konda Panthis	Baisakh Sudi 3 (April-May) One day	Religious Dedicated to the Guru of Konda Panthis	The Guru of Konda Panthis came here on this day from village Puran in U.P. His followers gather here in thousands before the fixed day. A <i>bhan- dara</i> (free kitchen) of <i>halwa</i> and <i>puri</i> is arranged. At about 8 p.m. the Guru takes disciples inside a room. None else is allowed to go in. All the disciples have a sacred look (darshan) of the Guru and taste <i>charnamrit</i> (sacred water). They make offerings to the Guru and then disperse	Konda Panthis
					
7 Kaithal	(a) Mela Kholi Wali Devi	Asoj Nau- ratas (September- October) Eight days	Religious Dedicated to Kholi Wali goddess	Sacred bath in the tank ; wor- ship of the goddess ; kirtan	Hindus
	(b) Mela Baba Ladana	Asoj (September- October) One day	Religious Dedicated to a saint Baba Ladana	Offerings at the <i>smadh</i> of the saint Wrestling ; <i>bazigar</i> feats	All
Gula Tahsil					
1 Shadipur H.B. 6	Mansa Devi Ka Mela	Chet Sudi 9 (March- April) One day	Religious The legend goes that a rich Banjara was robbed of his riches. He prayed to the goddess to restore his stolen property to him.	Worship of the goddess Wrestling	Hindus

TABLE VIII—(Contd.)

Name of village/ town	Fair/ festival	Date and duration	Significance and legend	Mode of obser- vance and entertainments	Castes/ commu- ties
1	2	3	4	5	6
			The thieves became blind and the Banjaras got his property back. He raised a temple dedicated to the goddess and a fair began to be celebrated		
2 Ramthali H.B. 99	Fair of Samadhan	Phagan Puranmashi (February- March) Two days	Religious Associated with a saint Bawa Darbar Chori Sahib who was Shah Jahan's minister but who gave up ministership and became a <i>faqir</i> . His <i>smadh</i> exists here	Offerings of <i>laddoos</i> , <i>patasas</i> and sweetmeats at the <i>smadh</i> Wrestling	All
3 Gula (Guhla) H.B. 116	Hazrat Mela Naubahar	Jeth Sudi 11 (May- June) Five days	Religious Dedicated to Pir Naubahar whose tomb exists here. It is believed that mad persons are cured of their illness by paying obeisance to the Pir	Worship of tomb ; cooked rice are offered ; he-goats and cocks are sacrificed Wrestling ; <i>kabaddi</i>	All
Thanesar Tahsil					
1 Kaliaana H.B. 228	Mela Sayyad Bram	On every Friday of bright half of the month One day	Religious Dedicated to Sayyad Bram whose tomb exists here. Bram belonged to a Sayyad family of village Kaliaana. He became a devotee of God at the age of seven and attained perfection in the worship of God when he was 20 years old. He spent the whole of his life in this village. The people were impressed by his wisdom and	Non-vegetarian offerings are made at the shrine of the saint ; people pray for the fulfilment of their wishes	All

TABLE VIII—(Contd.)


Name of village/ town	Fair/ festival	Date and duration	Significance and legend	Mode of obser- vance and entertainments	Castes/ communi- ties
1	2	3	4	5	6
			<p>spirituality and started worshipping him. It is said that the <i>fakir</i> was nine yards tall. He had a muscular body. He was kind hearted and hospitable and used to supply food and clothes to all those who needed his help. The land in which the tomb exists was the property of the saint. The following words are inscribed on the tomb "<i>Rab sada aram dega</i>", meaning that God will always bestow peace of mind. The name of the saint also seems to have been derived from this sentence</p> 		
2 Patti Jhamra Shahabad H.B. 253	Mela Devi	Chet Sudi 8 (March- April) One day	Religious Dedicated to Devi Bhagvati whose temple exists here	People visit the temple and worship the goddess	Hindus
3 Ismailbad H.B. 317	Mela Bauri	Chet Amavas (March- April) One day	Religious Some saint did top (penance) here and constructed a <i>baoli</i> which is held sacred	People take bath in the <i>baoli</i>	Hindus and Sikhs
Ratgal H.B. 376	Mela Biradh Kamyan	August One day	Religious		All
Thanesar	Somavati Amavas	Every Amavas that falls on a Monday One day	Religious	Bath in the sacred tank at Kurukshetra and Suraj Kund ; <i>bhajans</i> ; <i>kirtan</i> Wrestling and other games	Hindus

TABLE VIII—(Contd.)

Name of village/ town	Fair/ festival	Date and duration	Significance and legend	Mode of obser- vance and entertainments	Castes/ commu- nities
1	2	3	4	5	6
6 Ladwa	(a) Mela Maha- vir Swami	Ist Monday falling in the bright half of Pha- gan (Feb- ruary-March) Four days	Religious Dedicated to Mahavir Swami, the founder of Jainism	Obeisance paid to Mahavir Swami; a palanquin carrying the image of Maha- vir Swami taken out in the form of a procession, a sacred bath in the Rameshwar tank Wrestling ; fire- works; mimicry	Jains
	(b) Mela Devi or Bhawani Dawara fair	Chet Sudi 14 (March- April) One week	Religious Dedicated to Durga goddess whose temple exists here	Obeisance paid to the goddess in the temple; offerings made Wrestling; <i>kabaddi</i> ; cinema and circus shows	Hindus
Karnal Tahsil					
1 Hathira Khalsa H.B. 9	Devi Ka Mela	Chet Sudi 14 (March- April) Asoj Sudi 14 (September- October) One day	Religious Dedicated to the goddess. About 100 years ago a Brahmin of village Hathra had a dream that Devi (the goddess) was going to appear at a place Pajawa jaint situated to the south of the village and that a temple be created there. Temple was constructed accordingly and a fair came to be held	Worship of the deity Wrestling; <i>kabaddi</i>	Hindus
2 Badalwa H.B.15	Mela Onkar Khera	Bhadon 2 (August- September) One day	Religious While digging earth, an idol of Shiva was found at this place. A temple was con- structed. The fair is held on Bha- don 2, the date on which the idol was found	Worship of Shiva. <i>Sadhus</i> assemble in large numbers and perform <i>path</i> , puja. Wrestling; <i>kabaddi</i> ; volley- ball	Hindus

TABLE VIII—(Contd.)

Name of village/ town	Fair/ festival	Date and duration	Significance and legend	Mode of obser- vance and entertainments	Castes/ communi- ties
1	2	3	4	5	6
3 Pathera Khalsa H.B. 22	Mela Devi	Chet Badi 8 (March- April) One day	Religious Dedicated to goddess whose temple exists here	Worship and offerings in the the temple Wrestling	Hindus and Sikhs
4 Barhauili H.B. 33	Mela Pir	On every Thursday of Jeth (May-June) One day	Religious Dedicated to a <i>Pir</i>	Worship of the <i>Pir</i> ; sacrifice of animals ; bath in Jamuna canal Wrestling ; acrobatics	All
5 Amin Khalsa H.B. 33	Mela Suraj Kund	Bhadon 6 (August- September) Two days	Religious	Bath in the Suraj Kund Mimicry ; Wrestling ; <i>kabaddi</i> matches	Hindus and Sikhs
6 Nisang Jagir H.B. 34	Mela Devi	Chet (March- April) Asoj (September- October) One day	Religious Dedicated to goddess Durga, the goddess of shakti (power)	Feasting the children, especial- ly the virgins ; distribution of sweets, bath in the Nimmi Sar Tirath ; recitals from Durga Saptshati Wrestling ; kite- flying ; acrobatics ; professional singing	Hindus and Sikhs
7 Barsat H.B. 42	Jeth Ka Dussehra	Jeth 10 (May-June) One day	Religious	People take bath in Jamuna canal and say their prayers Wrestling ; <i>bazigar</i> feats	Hindus
8 Indri H.B. 46	Mela Devi	Chet Sudi 8 (March- April) Two days	Religious Dedicated to the goddess Durga whose temple exists here	Worship of the deity ; offerings of <i>parshad</i> Wrestling	Hindus and Sikhs
9 Shergarh Tapoo H.B. 56	Mela Basanti Mata	Chet Sudi 8 (March- April) One day	Religious Dedicated to Basanti goddess	Worship of and offerings made to deity ; women bring their children here and make them pay obeisance to the goddess Wrestling	Hindus and Sikhs

TABLE VIII—(Contd.)

Name of village/ town	Fair/ festival	Date and duration	Significance and legend	Mode of obser- vance and entertainments	Castes/ communi- ties
1	2	3	4	5	6
10 Nilu Kheri (a)	Lohri	Last day of Poh (December- January) One day	Seasonal	Bonfire lit at night ; games played during day	Hindus and Sikhs
	(b) Basant	Magh Sudi 5 (January- February) One day	Seasonal and recreational		Hindus and Sikhs
11 Karnal (a)	Guru Arjan Dev Shahidi Din	Jeth Sudi 4 (May-June) One day	Religious To commemorate the martyrdom day of Guru Arjan Dev	Piaos (free water- stalls) ; free kitchen ; non- stop recital of Granth Sahib ; <i>diwan</i>	Sikhs and Hindus
	(b) Guru Teg Bahadur Shahidi Din	Maghar Sudi 5 (November- December) One day	Religious To commemorate the martyrdom day of Guru Teg Bahadur	Non-stop recital of Granth Sahib ; kirtan, <i>diwan</i>	Hindus and Sikhs
	(c) Guru Gobind Singh's Janam Din	Poh Sudi 7 (December- January) One day	Religious Birth anniversary of Guru Gobind Singh	Procession ; non-stop recital of Granth Sahib ; Kirtan ; <i>diwan</i> Illuminations at night	Sikhs and Hindus
	(d) Shahidi Din Baba Zora- war Singh and Baba Fateh Singh	Poh Badi 1 (December- January) One day	Religious To commemorate the martyrdom day of Baba Zorawar Singh and Baba Fateh Singh, youn- ger Sahibzadas (sons) of Guru Gobind Singh	Non-stop recital of Granth Sahib ; kirtan ; <i>diwan</i>	Sikhs and Hindus
	(e) Guru Nanak Dev's Janam Din	Katak Puranmashi (October- November) One day	Religious Birth anniversary of Guru Nanak Dev	Procession ; recitations from Granth Sahib ; <i>kirtan</i> Illuminations ; fireworks	Sikhs and Hindus
	(f) Rath Yatra Dooj	Asarh Sudi 2 (June- July) One day	Religious Dedicated to Lord Mahavira founder of Jainism	Procession of Lord Mahavira in golden chariot	Jains
	(g) Mahavir Jayanti	Chet Sudi 13 (March- April) One day	Religious Birth	Procession ; worship in the	Hindus

TABLE VIII— (Contd)

Name of village/ town	Fair/ festival	Date and duration	Significance and legend	Mode of obser- vance and entertainments	Castes/ communi- ties
1	2	3	4	5	6
		April) One day	anniversary of Hanuman of Ramayana	temple Gatka	
12 Gharaunda	Mela Devi	Chet (March- April) Two days	Religious Dedicated to Durga goddess	Procession of the goddess; her worship in the temple; offering of <i>chhattar</i> made Wrestling	Hindus
Panipat Tahsil					
1 Panipat Tarf Ansar H.B. 12	Puranmashi fair	Katak Puranmashi (October- November) One day)	Religious	Bath in the Jamuna canal; <i>kirtan</i>	Hindus
2 Narah H.B. 20	Mela Sati	Bhadon Amavas (August- Septemer) One day	Religious During the Mus- lim period, there was a Muslim Nawab in the adjoining village Kawi, who out- raged the modesty of Hindu women. A Jat woman refused to yield to his evil designs and com- mitted <i>Sati</i> . The fair is held in honour of that woman	Obeisance and offerings at the <i>smadh</i> of the <i>Sati</i> Wrestling	Hindus mostly women
3 Babail H.B. 26	Puranmashi fair	Katak Puranmashi (October- November) One day	Religious	Bath in the Jamuna	Hindus
4 Baholi H.B. 66	Mela Nalewali Mata	Chet Badi 7 (March- April) One day	Religious Dedicated to goddess	Obeisance to the deity; women come singing songs Wrestling; Folk-dances	Hindus
5 Machhrauli H.B. 68	Mela Sitla Saptami	Chet Badi 7 (March- April) One day	Religious Dedicated to goddess Sitla	Worship of the deity	Hindus

TABLE VIII—(Concl'd.)

Name of village/ town	Fair/ festival	Date and duration	Significance and legend	Mode of obser- vance and entertainments	Castes/ commu- nities
1	2	3	4	5	6
6 Hatwala H.B. 83	Mela Jamuna	Jeth Sudi 10 (May- June) Sawan Puranmashi (July- August) Katak Puranmashi (October- November) One day	Religious	Bath in the Jamuna river; <i>kirtan</i>	Hindus mostly women
7 Bona Lakh H.B. 86	Ikadashi fair	Phagan Sudi 11 (February- March) One day	Recreational	Wrestling	All, men only
8 Panipat	(a) Digambar Jain Rath Yatra	Chet 5 and 9 (March- April) One day	Religious	Procession; worship of small idols	Jains
	(b) Dhup Dashami	Bhadon 10 (August- September) One day	Religious Dedicated to saint Badhu	Worship of small idols	Jains
	(c) Guru Nanak Dev's Janam Din	Katak Puranmashi (October- November) One day	Religious Birth anniver- sary of Guru Nanak Dev	Recitation from Granth Sahib; procession	Sikhs and Hindus
	(d) Janam Din Guru Go- bind Singh	Poh Sudi (December- January) One day	Religious Birth anniversary of Guru Gobind Singh	Do	Sikhs and Hindus
	(e) Pir Qalan- dar Shah	Maghar (November- December) Three days	Religious Dedicated to Pir Qalandar Shah	Nimaz (Prayers) offered at the shrine of the Pir	Muslims

Source: Census of India, 1961, Punjab District Census Handbook No. 4, Karnal District, 1966, pp. 102-23.)

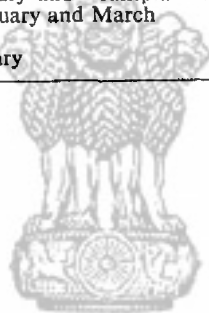
TABLE IX
Sowing and harvesting of *kharif* and *Rabi* Crops

Name of crop	Time of sowing	Time of harvesting
Kharif Crops		
Sugarcane	Middle of February to middle of April	End of November to end of April
Cotton (American and <i>Desi</i>)	Beginning of April to end of May	End of September to middle of November
Paddy	Nursery sown in June-July and transplanted in July-August	October-November
<i>Bajra</i>	July-August	End of September to beginning of October
<i>Jowar</i>	July-August	End of October
Maize	June-July	October
Pulses (<i>Moong, Moth, Mash</i>)	July-August	October
Gwar	July-August	October
Chillies	Nursery sown in June and transplanted in July	Picking continues from September to March
Vegetables	February to July	April to November
<i>Bhindi</i> (Lady finger)		
<i>Tori</i>		
<i>Ghia</i> (Gourd)		
<i>Karela</i> (Bitter gourd)		
<i>Kaddu</i>		
<i>Tinda</i>		
(The sowing time of <i>barani</i> crops is dependent upon the commencement of monsoons.)		
Rabi Crops		
Wheat	October to December	April
Gram	October	March-April
Barley	October to December	March to April
Oilseeds	September to November	December to March
(<i>Sarson, Toria*</i> , <i>Taramira</i>)		
<i>Berseem</i>	September-October	December to May

**Toria* beina zaid *Kharif*; its sowing is done in early September and harvesting in first week of December.

TABLE IX—(Concl'd.)

Name of crop	Time of sowing	Time of harvesting
<i>Methi</i>	November-December	February to April
Vegetables (Cauliflower, Peas, Carrot, Turnip, Radish, <i>Methi</i> , <i>Palak</i>)	August to October	October to February-March
<i>Masur</i>	November-December	March-April
Tobacco	Nursery sown in December and January and transplanted in February and March	May
Melon	February	May to June



सत्यमेव जयते

TABLE X
Area under Principal Crops

Crops	(thousand hectares)				
	1961-62	1965-66	1967-68	1968-69	1969-70
Foodgrains					
Rice	102	127	138	145	155
Jowar	39	25	37	23	23
Bajra	56	34	48	30	41
Maize	42	47	57	34	50
Wheat	192	213	242	273	322
Barley	9	18	41	31	18
Gram	191	110	121	101	95
Pulses					
Mash	1.50	1.52	1.84	1.43	1.42
Moong	0.12	0.04	0.17	0.03	0.04
Massar	15.19	15.00	17.76	15.87	13.35
Oilseeds					
Groundnut	—	0.14	0.45	0.18	0.16
Rape and Mustard	18	15	21	16	17
Sesamum (<i>Til</i>)	0.61	0.25	0.44	0.30	0.38
Linseed	0.32	0.19	0.32	0.27	0.18
Others					
Sugarcane	35	51	32	37	45
Potatoes	1.50	2.12	2.34	2.66	2.58
Cotton (American)	11	10	12	9	8
Cotton (<i>Desi</i>)	5	7	10	8	7

TABLE XI
Yield per Hectare of Principal Crops

Crops	(kilograms)				
	1961-62	1965-66	1967-68	1968-69	1969-70
Foodgrains					
Rice	1,204	1,252	1,431	1,163	1,570
Jowar	236	171	225	20	213
Bajra	197	398	679	326	750
Maize	712	874	1,113	617	1,250
Wheat	1,391	1,286	1,815	2,011	2,410
Barely	685	937	787	1,150	1,085
Gram	857	675	1,242	1,020	1,220
Oilseeds					
Groundnut		801	1,333	659	—
Others					
Sugarcane (in terms of <i>Gur</i>)	3,065	3,419	4,775	3,817	4,788
Potatoes	13,774	15,869	15,940	15,627	16,000
Cotton (American) Lint	242	247	225	179	187
Cotton (<i>Desi</i>) Lint	193	164	180	165	208

TABLE XII
Production of Principal Crops

(thousand metric tonnes)

Crops	1961-62	1965-66	1967-68	1968-69	1969-70
Foodgrains					
Rice	123	159	198	169	243
<i>Jowar</i>	9	4	8	1	5
<i>Bajra</i>	1	2	33	10	31
Maize	30	41	64	21	62
Wheat	267	274	439	549	776
Barley	6	17	32	36	20
Gram	164	74	150	103	116
Pulses					
<i>Mash</i>	0.71	0.73	0.60	0.5	0.6
<i>Moong</i>	(b)	(b)	0.10	(b)	(b)
<i>Massar</i>	9.60	7.50	7.00	5.6	6.0
Oilseeds					
Groundnut	—	0.11	0.60	0.1	(b)
Rape and Mustard	9.00	7.70	8.7	8	14
Sesamum	0.26	0.08	0.20	0.1	0.2
Linseed	0.10	0.09	0.10	0.1	0.1
Others					
Sugarcane (in terms of <i>Gur</i>)	107	174	153	141	215
Potatoes	20.60	33.60	37.30	41.6	41.0
Cotton (American) Lint	2.67	2.47	2.70	1.6	1.49
Cotton (<i>Desi</i>) Lint	0.89	1.15	1.80	1.2	1.46

('b' means less than 5 metric tonnes)

TABLE XIII
Demonstration and Seed Farms

Tahsil	Place	Block in which situated/ serving	Type of farm	Year of Establishment	Area	Crops sown
Karnal	Karnal	Karnal	Government District Demonstration Farm	1929	(Acres) 100	Sugarcane, wheat, gram, berseem and rice
	Shamgarh	Nilu Kheri (Nilo Kheri)	Government Seed Farm	1958	100	Wheat, gram, cotton, paddy, <i>bajra</i> hybrid
	Shekhopura Machuri	Nisang	-do-	1959	25	Wheat, barely and paddy
	Gharaunda	Gharaunda	-do-	1960	24	Vegetables
	Chika	Gula(Guhla)	-do-	1959	25	Wheat, gram and paddy
Kaithal	Qabulpur Khera	Asandh	-do-	1959	25	Wheat, gram, <i>chari</i> and paddy
	Jatheri (Pundri)	Pundri	-do-	1960	53	Wheat, gram, <i>chari</i> , <i>bajra</i> , maize, paddy and sugarcane
	Santokh Majra	Rajaund	-do-	1961	28	-do-
	Fatehpur	Pundri	-do-	1961	65	-do-
	Ram Nagar	Shahabad (Shahbad)	-do-	1959	25	Wheat, barley and paddy
Thanesar	Ratgal	Thanesar	-do-	1960	25	Wheat, gram and paddy
	Ladwa	Radaur	-do-	1961	36	-do-
Panipat	Siwahkheri	Panipat	-do-	1960	32	Wheat, gram, sugar-cane and paddy

TABLE XIV
Subsidies/Loans advanced to the Agriculturists

Particulars	1961-62	1965-66	1967-68	1968-69	1969-70
	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
Subsidies					
Sinking of percolation wells @ Rs. 300 per well	4,550	—	—	—	500
Green manuring @ Rs. 2.25 per acre	—	—	—	—	—
Purchase of fruit plants	—	—	—	—	—
Taccavi Loans					
Purchase of fertilizers	1,19,341	6,65,321	7,61,807	2,93,007	13,64,495
Purchase of tractors	66,000	16,000	1,09,000	—	—
Purchase of sugarcane seed	—	—	—	—	—
Under the Land Improvement Loans Act XIX of 1883 (Ordinary)	2,66,750	2,47,900	81,000	35,000	38,600
Under the Agriculturists Loans Act XII of 1884 (Ordinary)	6,75,940	1,99,000	4,30,000	75,000	3,12,600
Other Loans					
Sinking of percolation wells	1,46,125	—	—	—	—
Sinking of tubewells	2,46,500	—	—	—	—
Installation of pumping sets	1,10,000	—	—	—	—
Development of					
(i) horticulture	43,650	—	—	—	—
(ii) grapes	—	—	—	24,000	5,250

TABLE XV

Regional Artificial Insemination Centres and Stockmen Sub-Centres under the
Intensive Cattle Development Block, Karnal (Central Project)

Regional artificial insemination centre	Stockmen sub-centres	
	Location	Tahsil
(1)	(2)	(3)
Asandh	Katlahri	Karnal
	Kheri Naru	-do-
	Bansa	-do-
	Baras	-do-
	Singhra	-do-
	Chakdah	-do-
	Jalmana	-do-
	Shekhanpur	-do-
	Jundla	-do-
	Madlauda	Panipat
	Dharam Garh	-do-
	Waisar	-do-
	Kheri Sharaf-Ali	Kaithal
	Malak Pur	-do-
	Salwan	-do-
	Danauli	-do-
	Thari	-do-
	Mundh	-do-
	Phapralla	-do-
	Mardan Heri	-do-
	Baghana	-do-
	Paju Khurd	Jind (District Jind)
Panipat	Jalalpur	Karnal
	Sanauli Khurd	Panipat
	Jataul	-do-
	Kurar	-do-
	Israna	-do-
	Dahar	-do-
	Kabri	-do-
	Sutana	-do-
	Nimri	-do-
	Kutani	-do-
	Simla Maulana	-do-
	Luhari	-do-
	Asan Kalan	-do-
	Babail	-do-
	Chhaj Pur Khurd	-do-
	Kalkha	-do-
	Bapauli	-do-
Gharaunda	Majura	Karnal
	Pundri	-do-
	Phurlak	-do-
	Barauta	-do-
	Gagsina	-do-
	Gudah	-do-
	Rainpura	-do-
	Panauri	-do-
	Situndi	-do-

TABLE XV—(Concl'd.)

Regional artificial insemination centre	Stockmen sub-centres	
	Location	Tahsil
(1)	(2)	(3)
	Dadlana	Karnal
	Baraoli	-do-
	Uncha Siwana	-do-
	Barsat	-do-
	Kohand	-do-
	Qawi	Panipat
	Farid Pur	-do-
	Popra	Kaithal
	Chuhar Mazra	-do-
	Kalram (Kalron)	Karnal
	Kaimla	-do-
Samalkha	Naraina	Karnal
	Pasina Khurd	Panipat
	Khalila Mazra Nayan	-do-
	Hatwala	-do-
	Rakasbera	-do-
	Patti Kalyana	-do-
	Jaurasi Khalsa	-do-
	Gowali-a	-do-
	Baholi	-do-
	Dikadla	-do-
	Karhans	-do-
	Goela Kalan	-do-
	Puthar	-do-
	Borsham	-do-
	Manana	-do-
	Mandi	-do-
	Siwan	Guhla

सत्यमेव जयते

TABLE XVI

**Regional Artificial Insemination Centres and Stockmen Centres under
the Intensive Cattle Development Project, Pehowa at Thanesar
(State Project)**

Regional artificial insemination centre	Stockmen centres	
	Location	Tahsil
Pehowa	Thana	Gula
	Gumthala Garhu	Gula
	Bakhli	Gula
	Harigarh Kingan	Gula
	Seonsar	Gula
	Bodhni	Gula
	Jal Behra	Thanesar
	Ismailabad	Thanesar
Kaithal	Siwan	Gula
	Pundri	Kaithal
	Pharal	Kaithal
	Kaul	Kaithal
	Tauntha	Kaithal
	Habri	Kaithal
	Dhand	Kaithal
Gula (Guhla)	Tityana	Gula
	Pidhal	Gula
	Kangthali	Gula
	Agaund	Gula
	Bhagal	Gula
	Karah	Gula
Semen Bank, Thanesar	Papnawah	Kaithal
	Sarsa	Kaithal
	Lohar Mazra	Kaithal
	Mirza Pur	Thanesar
	Kurri	Thanesar
	Jhansa	Thanesar
	Dhurala	Thanesar
	Ajrana Kalan	Thanesar
	Jyotisar	Thanesar

TABLE XVII
Veterinary Hospitals and Dispensaries

(as on November 1, 1970)

Hospitals

Local Bodies

Tahsil Karnal

1. Karnal
2. Indri
3. Ballah
4. Nisang
5. Gharaunda

Tahsil Kaithal

6. Kaithal
7. Fatehpur
8. Rajaund
9. Kaul
10. Keorak
11. Pegan

Tahsil Panipat

12. Samalkha
13. Panipat
14. Adyana
15. Naultha

Tahsil Thanesar

16. Thanesar
17. Ladwa
18. Shahabad (Shahbad)
19. Thaska Miranji

Tahsil Gula (Guhla)

20. Gula (Guhla)
21. Pehowa

Government :

Tahsil Karnal

1. Nilu Kheri (Nilo Kheri)
2. Jundla
3. Kirmach

Tahsil Kaithal

4. Asandh
5. Harsaula

Tahsil Thanesar

6. Radaur
7. Jhansa

Permanent Outlying Dispensaries
Government :

Tahsil Karnal

1. Shekhopura Machuri

TABLE XVII—(Concl'd.)

	2. Kunjpura
	Tahsil Kaithal
	3. Chhatar
	4. Karora
	5. Rasinah
	Tahsil Thanesar
	6. Jathlana
Surra Centres	1. Karnal
	2. Kaithal
	3. Panipat
	4. Samalkha
	5. Thanesar



सत्यमेव जयते

TABLE XVIII
Damage caused to Crops and Houses by Heavy Rains and Floods

Year	Damage to crops			Damage to houses		Human lives lost	Cattle Head lost
	Area affected	Produce damaged	Value of damage	Number	Value		
	(Acres)	(Mds.)	(Rs.)		(Rs.)		
1955	1,56,680	..	93,26,024	14,272	17,58,742	5	1,863
1956	65,275	..	80,22,655	7,678	4,78,210	—	76
1957	3,760	..	4,52,300	63	9,780	—	—
1958	1,70,256	34,82,018	2,04,87,126	12,570	42,79,799	6	4
1959	12,212	1,15,910	13,99,656	33	6,300	—	2
1960	79,060	37,21,761	85,71,871	2,190	6,19,300	5	2
1961	62,147	17,43,544	89,41,920	25,461	3,18,970	—	99
1962	3,80,281	62,89,388	3,16,25,301	19,965	73,08,935	3	176
1963	1,07,491	16,30,830	1,23,97,547	5,623	5,43,137	—	51
1964	99,556	13,01,700	2,45,47,174	4,401	11,67,287	7	19
1965	—	—	—	—	—	—	—
1966	86,871	15,71,524	2,39,09,534	10,844	12,77,515	5	99
1967	52,617	6,55,070	31,58,796	2,238	4,48,757	9	4
1968	2,17,589	23,75,570	6,25,07,301	17,217	63,24,446	13	101
1969	58	—	40,750	31	11,325	1	—

TABLE-
Industrial Statistics (Small-Scale and

Serial number	Name of industry	Number of units						1964-65
		1964-65	65-66	66-67	67-68	68-69	69-70	
1	2	3	4	5	6	7	8	9
1	Woollen Goods	9	14	30	30	50	50	70.92
2	Agricultural Implements	289	216	81	196	200	275	190.00
3	Cycle Parts	4	4	4	4	5	5	1.56
4	Sewing Machines & Sewing Machine Parts	2	2	1	2	1	1	1.98
5	Steel Re-rolling	1	1	1	1	1	1	—
6	Nuts, Bolts & Bifurcated Rivets	4	4	4	4	5	4	12.86
7	Electric Cables	3	4	3	4	4	4	2.21
8	Scientific Instruments	1	2	2	2	2	2	0.22
9	Rubber Goods	5	3	1	1	6	6	4.52
10	Conduit Pipes & Industrial Tubings	3	4	7	7	7	7	38.64
11	Steel Furniture	6	7	7	10	11	11	11.51
12	Radio	22	9	11	14	8	8	4.73
13	Wood Wool	1	1	1	1	1	1	1.59
14	Zinc Oxide	3	3	3	2	—	—	1.31
15	Water Pipe Fittings	3	4	2	2	4	4	2.08
16	Cotton Ginning & Pressing	5	5	3	5	3	3	20,622 (Bales)
17	Non Ferrous Metals	6	6	5	3	3	3	2.34
18	Utensils	1	1	1	1	—	—	0.48
19	Power Looms (Cotton Tapes & Niwars)	3	3	3	3	3	5	2.10
20	Hosiery	1	1	1	—	—	—	1.00
21	Salt Petre	6	7	7	—	7	7	14.20
22	Plastic Goods	1	2	2	3	3	3	0.24

*The production is normally in terms of

XIX

Cottage Industries)

*Production (Rs. in lakhs)						Employment				
65-66	66-67	67-68	68-69	69-70	1964-65	65-66	66-67	67-68	68-69	69-70
10	11	12	13	14	15	16	17	18	19	20
83.08	200.00	200.00	100.00	125.00	622	942	1,350	1,300	1,500	1,580
119.38	84.14	84.74	326.00	380.00	1,012	1,065	554	1,136	1,200	1,250
1.50	2.07	2.29	2.30	2.50	35	28	26	23	48	48
2.60	2.01	2.25	2.00	2.15	49	36	48	47	24	24
8.83	8.48	8.00	8.00	12.00	34	35	25	19	30	33
10.98	10.31	10.30	20.00	25.00	110	83	83	85	110	115
2.85	1.53	1.60	2.25	2.37	21	22	13	16	34	35
0.80	0.70	0.66	0.70	0.50	12	15	12	30	30	15
2.83	1.25	1.45	2.50	3.80	40	22	9	9	45	55
37.44	61.51	66.39	85.00	105.00	150	126	283	399	400	400
14.82	15.76	15.00	18.00	18.50	77	91	115	110	115	117
2.28	2.10	1.08	0.18	0.22	45	30	35	38	14	16
2.00	2.23	2.35	2.45	2.40	14	15	17	10	11	12
1.26	1.12	—	—	—	13	11	10	—	—	—
6.56	1.54	1.40	0.90	1.05	26	60	19	15	24	30
21,338 (Bales)	57,000 (Bales)	55,000 (Bales)	10,000 (Bales)	8,000 (Bales)	315	374	365	365	340	300
1.80	0.80	0.50	0.45	0.55	25	23	20	12	12	10
0.03	0.57	0.06	—	—	25	19	19	19	—	—
3.92	2.00	2.00	3.25	4.85	11	24	20	20	35	40
0.80	0.36	—	—	—	17	6	5	—	—	—
15.56	18.00	20.00	22.00	21.00	38	52	70	80	85	85
0.24	0.20	0.25	0.25	0.30	3	4	3	9	9	10

value (Rs. in lakhs), unless otherwise indicated.

TABLE

Serial number	Name of industry	Number of units						1964-65
		1964-65	65-66	66-67	67-68	68-69	69-70	
1	2	3	4	5	6	7	8	9
23	Paints & Varnishes	2	2	2	1	2	2	0.05
24	Copper Linner	—	1	1	1	1	1	—
25	Sports Goods	1	1	1	1	1	1	0.27
26	Handloom Weaving (Cotton)	1,291	1,350	1,500	2,047	2,100	2,100	136.89
27	Shoes & Leather Goods	1,889	4,153	3,936	1,560	1,100	1,150	62.98
28	Ban & Rope Making	300	284	300	90	90	95	0.75
29	Leather Tanning	1,275	830	950	900	1,050	1,050	55.15
30	Gur & Khandsari Making	182	185	170	267	310	325	1.75
31	Village Oil Industry	50	55	40	20	26	28	0.60
32	Handicrafts :							
	(i) Woollen Carpets	2	2	2	3	3	4	1.06
	(ii) Ivory Goods	4	4	—	—	9	9	0.10

सत्यमेव जयते

XIX—(Concl'd.)

*Production (Rs. in lakhs)					Employment					
65-66	66-67	67-68	68-69	69-70	1964-65	65-66	66-67	67-68	68-69	69-70
10	11	12	13	14	15	16	17	18	19	20
1.95	1.10	0.15	2.10	2.30	9	10	8	3	13	15
0.38	0.50	0.36	0.36	0.30	—	5	6	4	6	4
0.30	0.28	0.35	0.20	0.25	11	12	10	10	6	9
141.22	223.00	227.48	400.00	400.00	6,954	6,927	7,500	8,000	10,000	10,000
61.50	75.00	61.00	30.00	35.00	4,153	3,936	6,500	6,054	1,300	1,500
0.78	0.80	0.56	0.60	0.56	315	308	315	94	90	95
7.83	8.20	9.00	11.15	11.08	1,410	1,167	1,250	1,200	1,380	1,385
2.30	1.80	25.00	30.88	32.56	364	370	335	991	992	1,008
0.65	0.50	0.30	0.35	0.38	70	75	50	25	37	39
0.89	0.79	2.50	3.00	3.50	40	18	25	40	47	53
0.06	—	—	0.21	0.23	9	6	—	—	18	21

सत्यमेव जयते

TABLE XX
Agricultural Co-operative Credit Societies

Period	Number of societies functioning at the end of the year	Membership		Share capital paid-up	Loans advanced during the year	Deposits
		Societies	Individuals			
				(Rs.)	(Rs.)	(Rs.)
Year ending June						
1957	604	—	20,713	5,70,826	13,88,406	2,25,750
1958	697	—	28,165	10,06,089	31,27,147	3,23,638
1959	824	—	35,370	13,07,160	38,70,569	3,36,750
1960	987	—	48,077	15,81,688	50,49,300	5,07,192
1961	1,126	—	56,092	18,56,113	49,98,717	6,55,558
1962	1,162	—	65,287	21,41,119	58,46,498	8,53,075
1963	1,181	—	68,874	24,10,515	50,62,038	11,91,433
1964	1,216	—	74,035	27,88,008	65,57,867	10,06,426
1965	1,227	—	82,415	31,99,432	96,00,997	10,78,287
1966	1,230	—	87,097	36,68,458	1,10,53,000	12,58,559
1967	1,215	—	93,833	44,25,000	1,43,70,000	15,51,000
1968	1,204	—	98,306	53,57,000	1,80,08,000	15,92,000
1969	1,202	—	1,04,308	67,46,000	3,47,76,000	17,87,000

TABLE XXI
Non-Agricultural Co-operative Credit Societies

Period	Number of societies functioning at the end of the year	Membership		Share capital paid-up	Loans advanced during the year	Deposits
		Societies	Individuals			
Year ending June				(Rs.)	(Rs.)	(Rs.)
1957	130	—	2,784	1,07,539	99,094	19,986
1958	138	—	2,831	1,11,166	1,68,084	23,254
1959	127	—	2,762	1,07,557	1,75,032	23,892
1960	129	—	3,075	1,17,570	1,86,332	33,334
1961	127	—	2,890	1,18,505	1,51,499	34,018
1962	132	—	3,223	1,31,896	1,72,852	38,563
1963	130	—	3,197	1,35,103	1,81,214	35,494
1964	130	—	3,326	1,34,093	2,51,285	38,621
1965	128	—	3,339	1,33,631	1,65,416	21,869
1966	123	—	3,308	1,35,529	1,78,000	42,502
1967	120	—	3,270	1,34,000	1,65,000	64,212
1968	121	—	3,290	1,34,000	1,46,000	45,000
1969	121	—	3,386	1,37,000	1,75,000	50,000

TABLE XXII

Working of the Karnal Co-operative Bank Ltd., Karnal

Period	Membership		Share capital paid-up	Loans advanced during the year	Deposits
	Societies	Individuals			
			(Rs.)	(Rs.)	(Rs.)
Year ending June					
1957	850	80	4,96,200	18,53,322	35,60,812
1958	991	89	5,74,500	38,28,435	39,13,596
1959	1,155	90	7,73,800	51,37,923	38,23,669
1960	1,352	85	9,06,400	70,23,546	42,61,253
1961	1,556	84	10,24,600	62,93,985	48,48,655
1962	1,677	82	11,32,300	73,42,388	52,86,301
1963	1,729	79	12,86,000	65,83,000	47,93,000
1964	1,822	79	14,97,000	98,06,000	52,21,000
1965	1,872	77	16,54,000	1,19,07,000	64,22,000
1966	1,901	75	19,78,000	1,34,51,000	71,03,000
1967	1,947	72	26,50,000	1,54,29,000	89,03,000
1968	1,958	72	42,48,000	2,07,32,000	1,54,79,000
1969	2,010	72	68,41,000	4,21,44,000	1,69,68,000

TABLE XXIII
Joint Stock Banks

Serial number	Name of the town	Name of the bank	Number of offices functioning
1	2	3	4
1	Gharaunda	State Bank of Patiala	1
2	Kaithal	The Central Bank of India	1
		State Bank of India	1
		The Punjab National Bank	1
3	Karnal	The Central Bank of India	1
		The New Bank of India	1
		The Punjab National Bank	2
		The Punjab and Sindh Bank Ltd.	1
		State Bank of India	1
4	Ladwa	The Central Bank of India	1
5	Madlauda	The Central Bank of India	1
6	Nilu Kheri (Nilo Kheri)	State Bank of India	1
7	Panipat	The Central Bank of India	1
		The Punjab National Bank	1
		State Bank of India	2
8	Pehowa	The Central Bank of India	1
9	Pundri	The Central Bank of India	1
10	Radaur	The Lakshmi Commercial Bank Ltd.	1
11	Samalkha	The Punjab National Bank	1
		State Bank of Patiala	1
12	Shahabad (Shahbad)	The Punjab National Bank	1
13	Thanesar	State Bank of India	2
14	Tirawari (Taraori)	The Central Bank of India	1

TABLE XXIV
Conversion Factors

Money			
	1 pie	=	0.52 paise
	1 pice	=	1.56 paise
Length			
	1 inch	=	2.54 centimetres
	1 foot	=	30.48 centimetres
	1 yard	=	91.44 centimetres
	1 mile	=	1.61 kilometres
Area			
	1 square foot	=	0.093 square metre
	1 square yard	=	0.836 square metre
	1 square mile	=	2.59 square kilometres
	1 acre	=	0.405 hectare
Volume			
	1 cubic foot	=	0.028 cubic metre
Capacity			
	1 gallon (Imperial)	=	4.55 litres
	1 seer (80 tolas)	=	0.937 litre
Weight			
	1 tola	=	11.66 grams
	1 chhatak	=	58.32 grams
	1 seer	=	933.10 grams
	1 maund	=	37.32 kilograms
	1 ounce	=	28.35 grams
	1 pound	=	453.59 grams
	1 hundred weight	=	50.80 kilograms
	1 ton	=	1016.05 kilograms

TABLE XXV
Roads maintained by the Public Works Department

Name of the road	Total length within the district	Metalled	Unmetalled
1	2	3	4
(Kilometres) (Kilometres) (Kilometres)			
National Highways			
Grand Trunk Road	125.05	125.05	—
Total	125.05	125.05	—
State Highways			
Kala Amb, Ambala, Pehowa, Kaithal, Narwana, Fatehabad Road (S. H. 2)			
(a) Section Ambala Pehowa	27.61	27.61	—
(b) Section Pehowa Kaithal	26.80	26.80	—
(c) Section Kaithal Narwana	2.21	2.21	—
Kala Amb, Sadhaura, Shahabad (Shahbad), Thol Road (S. H. 4)			
(a) Section Shahabad (Shahbad) Barara	8.63	8.63	—
(b) Section Shahabad (Shahbad) Thol	17.71	10.20	7.51
Saharanpur, Radaur, Pipli, Pehowa, Chika Road (S. H. 6)			
(a) Section Saharanpur Kurukshetra	30.42	30.42	—
(b) Section Pipli Kurukshetra	4.19	4.19	—
(c) Section Thanesar Pehowa	27.37	27.37	—
(d) Section Pehowa Chika	27.05	27.05	—
Kunjpora, Karnal, Kaithal, Khanauri Road (S.H.8)			
(a) Section Karnal Kunjpora	9.74	9.74	—
(b) Section Karnal Kaithal	61.87	61.87	—
(c) Section Kaithal Khanauri	13.71	13.00	0.71
Karnal, Asandh, Jind, Hansi, Tosham, Sodiwas Road (S.H. 12)			
(a) Section Karnal Asandh	36.80	36.80	—
(b) Section Asandh Jind	26.27	26.27	—

TABLE XXV—(Contd.)

Name of the road	Total length within the district	Metalled	Unmetalled
1	2	3	4
	(Kilo-metres)	(Kilo-metres)	(Kilo-metres)
Panipat, Safidon, Jind, Bhiwani, Loharu Road (S.H. 14)			
(a) Section Panipat Safidon up to district boundary	22.89	22.89	—
Muzaffarnagar, Sanauli, Panipat, Gohana, Rohtak, Bhiwani Road (S.H. 16)			
(a) Section Panipat Sanauli	18.31	18.31	—
(b) Section Panipat Gohana	24.30	24.30	—
Karnal, Ladwa, Shahabad (Shahbad) Road (S.H. 7)			
(a) Section Karnal Ladwa	32.12	32.12	—
(b) Section Shahabad (Shahbad) Ladwa from Ladwa side	8.98	8.98	—
(c) Section Shahabad (Shahbad) Ladwa from Shahabad (Shahbad) side	7.23	7.23	—
(d) Section Sarwati Kharindwah	8.98	—	8.98
Karnal, Kachhwa, Pehowa, Patiala Road (S.H. 9)			
(a) Section Karnal Sambhli	16.00	8.00	8.00
(b) Section Sambhli Kaul	18.00	—	18.00
(c) Section Kaul Dhand	6.00	6.00	—
(d) Section Dhand Pehowa	9.94	9.94	—
(e) Section Pehowa Patiala up to district boundary	9.20	1.60	7.60
Meerut, Sonapat, Gohana, Asandh, Kaithal, Patiala Road (S.H. 11)			
(a) Section Jagsi Safidon up to district boundary	15.18	—	15.18
(b) Section district boundary to Asandh	8.38	8.38	—
(c) Section Asandh Rajaund	13.57	13.57	—
(d) Section Rajaund Kaithal	26.40	26.40	—
(e) Section Kaithal Gula (Guhla)	31.51	31.51	—
(f) Section Chika Tityana	5.41	5.41	—
(g) Section Tityana Patiala	1.81	1.81	—
Grand Trunk Road covered By-Pass	5.73	5.73	—
Total	599.34	531.86	67.48

TABLE XXV—(Contd.)

Name of the road	Total length within the district	Metalled	Unmetalled
1	2	3	4
	(Kilometres)	(Kilometres)	(Kilometres)
District Major Roads			
Rajaund Pundri Road	23.68	23.68	—
Pundri Dhand Road	13.52	13.52	—
Kond, Munak, Salwan, Asandh Road			
(a) Section Kond Munak	14.86	14.86	—
(b) Section Munak Salwan	12.88	12.88	—
(c) Section Salwan Asandh	10.63	10.63	—
Nilu Kheri (Nilo Kheri) Kaul Road	27.44	27.44	—
Total	103.01	103.01	—
Other District Roads			
Approach to Karnal Kaithal Road from village Pundri	0.95	0.95	—
Approach to Karnal Kaithal Road from Fatehpur	0.57	0.57	—
Kheri Sharafali Mandwal Road	3.78	0.78	3.00
Kaithal Pehowa Road to village Keorak	0.71	0.50	0.21
Pundri Habri Road	9.66	—	9.66
Pundri Rajaund Road to Karora	3.09	—	3.09
Asandh Panipat Road to Moana	8.00	0.80	7.20
Asandh Jind Road to Dhatrat	11.00	3.00	8.00
Gurdwara Zora Sahib to Gurdwara Damdama Sahib in village Naine Sadion	0.81	0.30	0.51
Naguran Deoban Road	30.60	—	30.60
Gula (Guhla) Kharak Road via Agondh	20.29	—	20.29
Tirawari (Taraori) Saga Road	11.20	—	11.20
Panipat Asandh Road to Madlauda Mandi	0.97	0.97	—
Rambha approach Road	1.93	1.93	—
Tirawari (Taraori) approach Road	1.61	1.61	—
Amia approach Road	1.77	1.77	—
Butana approach Road	0.56	0.56	—

TABLE XXV—(Contd.)

Name of the road	Total length within the district	Metalled	Unmetalled
1	2	3	4
	(Kilometres)	(Kilometres)	(Kilometre)
Road in Haryana Polytechnic Nilu Kheri (Nilo Kheri)	0.81	0.81	—
Approach Road from Amin to railway station	2.80	2.80	—
Approach Road from village Tirawari (Taraori)	1.30	1.30	—
Panipat Barsat Road	12.98	12.98	—
Panipat Asan Mor Majra Road	15.00	—	15.00
Panipat Asandh Road to village Begampur Bapaut	3.22	3.22	—
Nilu Kheri (Nilo Kheri), Karsa, Dhand Road to village Posam	1.50	1.50	—
Khot Barna Road	5.00	4.00	1.00
Karnal, Indri, Ladwa Road to village Dhamsi	1.02	—	1.02
Nilu Kheri (Nilo Kheri), Karsa Dhand Road mile 4/5 to village Darbarthala to Sambhli	3.72	—	3.72
Nilu Kheri (Nilo Kheri) Karsa Dhand Road mile 4/8 to village Ajanthali	1.06	—	1.06
Grand Trunk Road mile 92/8 to village Umri	2.06	—	2.06
Indri Bayana Road	6.44	—	6.44
Ladwa Rai Tikhana Road	4.00	4.00	—
Grand Trunk Road to Ramba	2.90	—	2.90
Grand Trunk Road to village Padhana	0.80	0.80	—
Madlauda Qawi Road	5.58	1.80	3.78
Samalkha Hathwala (Hatwala) Road	10.58	10.58	—
Samalkha Chulkana Road	3.91	3.91	—
Kutail approach Road	3.41	3.41	—
Gharaunda approach Road	0.81	0.81	—
Panipat Kabri Road	2.60	2.60	—
Panipat Babail Road	7.20	3.40	3.80
Panipat Jataul Sutana Road	13.94	—	13.94
Panipat Gohana Road to village Borsham	5.30	4.50	0.80
Grand Trunk Road to village Ganjbar	0.43	0.43	—

TABLE XXV—(Contd.)

Name of the road	Total length within the district	Metalled	Unmetalled
1	2	3	4
	(Kilometres)	(Kilometres)	(Kilometres)
Grand Trunk Road to village Barauli	0.80	0.80	—
Grand Trunk Road to village Manana	1.35	1.35	—
Grand Trunk Road to village Machhrauli	1.25	1.25	—
Grand Trunk Road to village Jati Pur	1.20	1.20	—
Kaimla Gharaunda Road	3.42	3.42	—
Karnal Asandh Road to village Bansa	3.87	2.00	1.87
Gharaunda to Shekhupura Road	3.22	3.22	—
Gharaunda to Arainpura Road	4.25	4.25	—
Grand Trunk Road to Samana	1.45	1.45	—
Karnal Asandh Road to village Uplana	1.95	1.95	—
Grand Trunk Road to village Faridpur	1.65	1.00	0.65
Grand Trunk Road to Babarpur	0.16	—	0.16
Samalkha Biholi Road	5.65	1.90	3.75
Gharaunda Phurlak Road	4.00	4.00	—
Phurlak Gagsina Road	5.00	—	5.00
Karnal Kaithal Road to village Baras	1.93	1.93	—
Karnal Kaithal Road to Gonder	3.60	—	3.60
Grand Trunk Road By-Pass to village Ranwar	3.30	3.30	—
Newal to Baragaon Road	3.60	—	3.60
Baragaon Ghiyar Road	4.90	—	4.90
Grand Trunk Road By-Pass to village Tikri via Kailash	3.00	—	3.00
Approach Road to Grand Trunk Road	0.30	0.30	—
Radaur By-Pass	2.72	2.72	—
Thanesar Jhansa Road	20.74	20.74	—
Grand Trunk Road mile 102 to village Ram Nagar	1.28	1.28	—
Grand Trunk Road mile 112/4 to village Samalkhi	1.79	—	1.79
Grand Trunk Road mile 107/2 to village Madanpur	1.74	1.74	—

TABLE XXV—(Contd.)

Name of the road	Total length within the district	Metalled	Unmetalled
1	2	3	4
	(Kilometres)	(Kilometres)	(Kilometres)
Grand Trunk Road mile 11/2 to village Masana	1.22	1.22	—
Thol Jhansa Road	8.76	8.04	0.72
Samalkha Approach Road	0.87	0.87	—
Panipat Bapauli Road	7.16	7.16	—
Asandh Jind Road to Baghana	3.00	3.00	—
Araimpura Chaura Road	3.02	—	3.02
Chikana Kiwana Namonda Road	5.40	—	5.40
Grand Trunk Road to Patti Kalyana	0.60	0.60	—
Grand Trunk Road to Diwana <i>via</i> Siwan	3.60	—	3.60
Grand Trunk Road to Basdhara	1.30	—	1.30
Samalkha Hathwala (Hatwala) Road to village Atta	3.20	—	3.20
Panipat Gohana Road to village Pardhana	6.84	—	6.84
Grand Trunk Road to Karhans	0.65	0.65	—
Sanauli Rishpur Road	1.20	1.20	—
Grand Trunk Road to Pasina Kalan	2.45	2.45	—
Patti Kalyana Rakashera Road	12.00	—	12.00
Phurlak Situndi Road	3.75	—	3.75
Qawi Bhuslan Road	4.00	—	4.00
Panipat Barsat Road to Faridpur	1.60	—	1.60
Ganaur Shahpur Road	9.55	9.55	—
Chika Gula (Guhla) Road	3.20	—	3.20
Jakhauli Balu Road	4.00	—	4.00
Alewah Rajaund Road	14.00	—	14.00
Approach road from Karnal, Kaithal Road to village Narri	1.10	1.10	—
Pundri Rajaund Road to village Sarda Kotrah to Rajaund Kaithal	4.16	—	4.16
Pundri Habri Road to Pundri Rajaund Road	1.27	—	1.27
Kaithal Pehowa Road to village Ujana	0.80	—	0.80

TABLE XXV—(Contd.)

Name of the road	Total length within the district	Metalled	Unmetalled
1	2	3	4
	(Kilometres)	(Kilometres)	(Kilometre)
Karnal Kaithal Road to village Geong	3.36	2.36	1.00
Kaithal Rajaund Road to village Rihara	6.42	4.00	2.42
Kaithal Pehowa Road to village Jagdishpura	1.02	—	1.02
Kaithal Rajaund Road to village Harsaula <i>via</i> Peodah	4.06	4.06	—
Umri Ineri Road	16.00	—	16.00
Indri Gachi Road	12.00	—	12.00
Karnal Munak Road	22.50	22.50	—
Indri Approach Road	0.16	—	0.16
Kalwa Heri Road	0.32	0.32	—
Pipli Pehowa Road to village Sandhault	1.50	—	1.50
Karnal Ladwa Sanghoi Road	3.20	—	3.20
Kaithal Pehowa Road to Kultaran	0.80	—	0.80
Kaithal Patiala Road to village Kheri Ghulam Ali	5.60	1.50	4.10
Kaithal Pehowa Road to village Rasulpur <i>via</i> Begpur	4.30	—	4.30
Kaithal Pehowa Ambala Road to village Bhorak <i>via</i> Hiragarh	2.60	—	2.60
Keorak to Tik <i>via</i> Baraut	9.00	—	9.00
Kaithal Patiala Road to village Sair	6.04	—	6.04
Padla Guha Road	4.43	—	4.43
Asandh Rajaund Road to village Mundh	3.22	—	3.22
Barsana Bakkal Road	9.60	—	9.60
Link Road mile 103 of Grand Trunk Road to Churni Jattan	1.72	1.72	—
Mustafabad railway station to Kheri Lakkha Singh	6.33	—	6.33
Ladwa Sultanpur Road	2.00	2.00	—
Ladwa Gadli Road	8.00	—	8.00
Karnal Meerut Road	9.12	5.00	4.12
Kalyana Golpura Road	6.44	—	6.44

TABLE XXV—(Concl'd.)

Name of the road	Total length within the district	Metalled	Unmetalled
1	2	3	4
	(Kilometres)	(Kilometres)	(Kilometres)
Shahabad (Shahbad) Thol Road to village Nagla	0.70	—	0.70
Shahabad (Shahbad) Thol Road to village Kalsana	2.60	—	2.60
Radaur Jathlana Road to village Gumthala	4.25	—	4.25
Approach from Grand Trunk Road to village Zainpur	0.76	—	0.76
Samalkha Naraina Road	6.83	—	6.83
Total	587.57	215.69	371.88
Grand Total	1,414.97	975.61	439.36



TABLE XXVI
Roads maintained by the Zila Parishad

Name of the road	Length within the district		
	Total	metalled	unmetalled (Fair- weather motorable)
	(Miles)	(Miles)	(Miles)
Kaithal Jind Hansi Road (from village Deoban to Naguran)	18	—	18
Karnal to Arty to Beggi Ferry Road	5	—	5
Karnal Hansi Road	24	15	9
Rajaund Kathana Road	5	—	5
Karnal Shamli (Mirgahan) Ferry Road	8	1	7
Shodhapur Asan Asandh Road	15	—	15
Panipat Alupur Road	14	—	14
Kaithal Thanesar Road	25	—	25
Approach road to Shamgarh	1½ f	1½ f	—
Approach road to Phusgarh	1 m-1½ f	1 m-1½ f	—

m—mile

f—furlong

TABLE
Number of

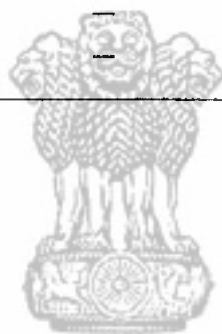
Year	Cars	Jeeps	Station wagons	Buses	Motor cycles
1962-63	109	32	—	198	108
1963-64	142	37	—	222	103
1964-65	257	70	1	436	240
1965-66	280	82	3	452	310
1966-67	299	103	4	486	424
1967-68	322	138	6	505	620
1968-69	374	179	10	526	832
1969-70	455	253	10	558	1,398



XXVII

Registered Vehicles

Trucks	Tractors	Taxis	Auto-cycles	Scooters	Tempos
98	377	—	4	32	16
346	600	—	8	61	17
674	1,025	—	12	98	34
731	1,181	—	45	122	44
784	1,314	—	82	153	48
855	1,674	—	93	224	50
1,008	2,027	—	115	231	68
1,212	2,774	—	117	260	78



सत्यमेव जयते

TABLE

Railway

Serial number	Name of Station	Passenger traffic			
		Monthly average traffic		Monthly average earnings	
		Outward	Inward	Passenger	Goods (Parcel)
1	2	3	4	5	6
		(Number)	(Number)	(Rs.)	(Rs.)
1.	Mohri	3,212	516	2,105	60
2.	Shahabad Markanda	28,954	24,730	26,473	1,492
3.	Dhirpur	8,736	1,103	5,395	20
4.	Amin	180	100	174	2
5.	Nilu Kheri (Nilo Kheri)	1,62,722	1,79,841	1,63,000	9,515
6.	Tirawari (Taraori)	16,448	10,327	14,370	242
7.	Bhaini Khurd	..	..	..	..
8.	Bazida Jatan	66,864	6,643	49,602	156
9.	Karnal	59,497	30,924	96,485	11,720
10.	Gharaunda	37,536	16,001	16,366	272
11.	Kohand	5,107	3,830	2,956	—
12.	Babarpur	1,465	476	1,089	35
13.	Panipat	93,920	9,39,333	1,32,957	14,312
14.	Diwana	5,900	3,321	3,415	24
15.	Samalkha	26,195	10,705	23,150	524
16.	Asan Kalan	2,810	1,702	1,346	—
17.	Madlauda	10,443	6,806	6,832	142
18.	Thanesar	6,918	4,845	6,761	312
19.	Kurukshetra	46,991	6,44,127	1,22,656	22,152
20.	Pindarsi	7,619	5,631	5,830	138
21.	Pehowa Road	9,648	7,623	6,377	103
22.	Fik	8,495	6,209	5,564	71
23.	Kaithal	45,286	31,758	49,715	3,318

XXVIII

Traffic

(1968—69)

Goods traffic			
Monthly average traffic		Monthly average earnings	
Inward	Outward	Inward	Outward
7	8	9	10
(Quintals)	(Quintals)	(Rs.)	(Rs.)
—	—	—	—
9,548	16,732	32,545	23,060
—	—	—	—
—	—	—	—
27,882	42,703	1,40,039	74,320
2,367	2,448	11,109	37,522
..
—	—	—	—
23,642	42,435	1,71,508	1,56,657
11,100	4,780	26,242	6,324
—	—	—	—
—	0.25	—	—
7,141	13,583	2,83,665	3,964
—	—	—	—
18,823	6,294	49,052	24,557
—	—	—	—
7,169	547	24,532	4,630
—	—	—	—
76,285	60,298	1,54,034	81,096
—	—	—	—
1,240	6,723	8,398	14,640
—	—	—	—
32,426	4,97,390	1,64,596	2,21,018

TABLE XXIX

Dak Bungalows, Inspection Bungalows, Rest Houses and Tourists Houses

Serial number	Name	Number of suites	Name of reservation authority
1	2	3	4
Kaithal tahsil			
1.	Civil Rest House, Kaithal	2	Deputy Commissioner, Karnal
2.	Civil Rest House, Pehowa	3	ditto
3.	Civil Rest House, Gula (Guhla)	2	ditto
4.	Civil Rest House, Bhagal	2	ditto
5.	Dak Bungalow, Pundri	2	Executive Engineer (B&R), Kaithal
6.	Inspection Hut, Seonsar (Forest Colony)	2	Divisional Forest Officer, Karnal
7.	Canal Rest House, Kaithal	3	Executive Engineer, Pehowa Division, Kaithal
8.	Canal Rest House, Pidhal	2	ditto
9.	Canal Rest House, Urlana	2	ditto
10.	Canal Rest House, Murtaza Pur	3	ditto
11.	Canal Rest House, Mundhari	2	Executive Engineer, Narwana
12.	Canal Rest House, Kaul	2	ditto
13.	Canal Rest House, Habri	2	ditto
14.	Canal Rest House, Jakhauli	2	ditto
15.	Canal Rest House, Mand Wal	2	ditto
16.	Canal Rest House, Pegan	2	ditto
17.	Police Rest House, Rajaund	1	Superintendent of Police, Karnal
18.	Police Rest House, Asandh	1	ditto
19.	Canal Rest House Asandh	2	Executive Engineer, Western Jamuna (Yamuna) Canal, Karnal
Karnal tahsil			
20.	Zila Parishad Dak Bungalow, Karnal	3	Secretary, Zila Parishad, Karnal
21.	Dak Bungalow, Gharaunda	2	Executive Engineer (B & R), Panipat
22.	New Rest House, Karnal	6	Director, National Dairy Research Institute, Karnal
23.	Canal Rest House, Balu	2	Executive Engineer, Western Jamuna (Yamuna) Canal, Karnal

TABLE XXIX—Contd.)

Serial number	Name	Number of suites	Name of reservation authority
1	2	3	4
24.	Canal Rest House, Indri	3	Executive Engineer, Western Jamuna (Yamuna) Canal, Karnal
25.	Canal Rest House, Jalmana	2	ditto
26.	Canal Rest House, Jani	2	ditto
27.	Canal Rest House, Karnal	2	ditto
28.	Canal Rest House, Munak	2	ditto
29.	Canal Rest House, Malakpur	2	Executive Engineer, Pehowa Division, Kaithal
30.	Canal Rest House, Badhara	2	ditto
31.	Canal Rest House, Barthal	2	Executive Engineer, Narwana Division, Narwana
32.	Canal Rest House, Mor Majra	2	ditto
33.	Government Guest House, Nilu Kheri (Nilo Kheri)	—	Chief Engineer, Agro-Industries, Nilu Kheri (Nilo Kheri)
34.	P.W.D. Rest House, Karnal	4	Executive Engineer (B&R), Karnal
Panipat tahsil			
35.	Rest House and Dak Bungalow, Panipat	3	Executive Engineer (B&R), Panipat
36.	Rest House and Dak Bungalow, Samalkha	2	ditto
37.	Canal Rest House, Israna	2	Executive Engineer, Western Jamuna (Yamuna) Canal, Delhi Division, Delhi
38.	Canal Rest House Badli	2	ditto
39.	Canal Rest House, Luhari	2	ditto
40.	Canal Rest House, Kurana	3	ditto
41.	Canal Rest House, Binjhaul	4	ditto
Thanesar tahsil			
42.	Canal Rest House, Jyotisar	4	Executive Engineer, Pehowa Division, Kaithal
43.	Shelter Hut, Lotni	1	ditto
44.	Canal Rest House, Jhansa	2	ditto
45.	Shelter Hut, Thanesar	1	ditto
46.	P.W.D. Rest House, Pipli	2	Executive Engineer (B&R), Kurukshetra
47.	P.W.D. Rest House, Shahabad (Shahbad)	2	Executive Engineer, Provincial Division No. II, P.W.D. (B&R) Ambala Cantt.
48.	P.W.D. Rest House, Ladwa	2	Executive Engineer, Construction Division, Jagadhri
49.	Canal Rest House, Radaur	3	Executive Engineer, Western Jamuna (Yamuna), Canal Division, Dadpur

TABLE XXX

List of Post Offices (31.3.1970)

Head Office	Sub-Office	Branch Office
Karnal Head Office—		Barauta Jundla Gate (Jundla) Kachhwa Kheri Naru Kutail (Kutel) Madhuban Sambli (Sambhli) Sagga (Saga) Sirsi
	Karnal City	
	Karnal G.B.S.	
	Karnal Kutchery	
	Karnal Model Town	
	Karnal N.D.R. I.	
	Karnal Nai Mandi	
	Karnal Partap Pura	
	Karnal Ram Nagar	
	Karnal Sadar Bazar	
	Amin	Badson (Bhadson) Bansal (Bairsal) Samana Bahu (Samana Bapur)
	Asandh	Ardana Bahri Baghana Bandrala (Bidrala) Malikpur (Malakpur) Mowana (Moana) Phaphrana (Phaprara) Popran (Popra) Rohrah (Rohera) Salwan
	Ballah (Bala)	Bairangran Goli Munak Rair Kalan
	Chika	Bhagal Pedal (Pidhal)
	Dhatrat	Alewa (Alewah) Badhana Chhatar Dhillowal (Dhilluwal) Dahula (Dahaula) Gulliana Sangli (Gulyana)

TABLE XXX—(Contd.)

Head Office	Sub-Office	Branch Office
Karnal Head Office (contd.)		Kachhana Kalan (Kachrana Kalan) Kathana Khanda Mandi Kalan Mohammad Khua (Mohammad Khera) Naguran Peegan (Pegan) Ratauli (Ritauli) Sandil Thoha (Thuwah)
	Engineering College, Kurukshetra	
	Fatch Pur	Mundri (Mundhari) Naina Dhos (Nainan) Narar
	Gharaunda	Babarpur Barsat Barna (Barana) Basdhara Chaunra (Chaunrah) Dadlana Faridpur Gagsina Gudha (Gudah) Jamalpur Kaimla (Kalmila) Kalron Kohand Phurlak Pundri Raipur Jattan (Raipur, Raipur (Rainpura) Staundi (Situndi) Sheikhupura Khalsa (Shekhopura Khalsa)
	Gharaunda Town	
	Guhla	Agondh (Agaund) Bhuna Kharaundi (Kharaudi) Kharak Kharkan
	Indri	Bibipur Jatan (Bibipur Jattan) Biana (Bayana Jagir) Darar Garhi Birbal (Gadhi Birbal) Kalsora (Kalsaura) Nagla Roran Rambha (Ramba) Sanghowa (Singhoha)
	Ismaila Bad	Aero Kalan (Rair Kalan) Ajrawar Chammu (Chimmon)

TABLE XXX—(Contd.)

Head Office	Sub-Office	Branch Office
Karnal Head Office— (contd.)		Roshanpur Roti (Rohti) Thaska Miranji Thol
	Jhansa	Ajrana Kalan Bushtala Kurri Lukhi Nalvi (Nalwi) Tangaur
	Jundla	Bansa Jalmana Katlehri (Katlaheri) Karsa Chore (Karsa Chor) Padha Peont (Pewant) Sheikhupura Manchuri (Shekhopura Machuri) Uplana
	Kaithal City	
	Kaithal Mandi	Ashoka Colony Baraut Chandana Dewal (Diwal) Geong Harsala (Harsaula) Keorak Nauch (Nawach)
	Kaul	Barna Dhand Jadala (Jandaula) Pabnawa (Pabnawah) Pharral (Pharal) Sarsa
	Kunjpora	
	Kurukshetra	Bhore Saidan (Bhor Saidan) Durala (Dhurala) Dhabkheri Gurukul Hathera (Hathira) Jyotisar Kirmach Mathana Murtazapur Sandhola Sandholi Udana
	Kurukshetra University	
	Ladwa	Ban Kheri Dabdalan Nawarsi Prahladpur (Pahlad Pur)

TABLE XXX—(Contd.)

Head Office	Sub-Office	Branch Office
Karnal Head Office— (contd.)	Madlauda	Ahar
		Adyana
		Allupur (Alu Pur)
		Atuala (Attawla)
		Kalkha
		Kurna (Kurana)
		Lohari (Luhari)
		Narah
		Qawi
		Shera (Sherah)
		Waizar (Waisar)
	Nilokheri	Aibla (Ahbla)
		Jambha (Jamba)
		Majra Roran
		Nighdu (Nigdhu)
		Sandhir (Sandher)
		Sanwat
		Sikri
	Nisang	Agondh (Agaund)
		Ahon (Ahun)
		Amunpura (Amunpur)
		Balu
		Brass (Baras)
		Dachor (Dachaur)
		Gondar
		Manjura (Majura)
		Mehmal
		Rai Sina (Rai San)
		Sakra
		Sangrauli
		Teontha (Tauntha)
	Pai	Bakal (Bakkal)
		Bhana (Bhuna)
		Kakot (Kakaut)
		Karora
		Sarhada (Serhadda)
		Sisla Sismora
	Panipat	Asan Kula (Asan Kalan)
		Babail
		Binjhol (Binjhaul)
		Buana Lakhu
		Bursham (Borsham)
		Chandauli
		Dahar
		Israna Kalan (Israns)
		Jatoli (Jataul)
		Kabri
		Karad
		Mandi
		Naulatha (Naultha)
		Noorwala (Panipat Taraf Makhdumzadgar)
		Panipat Ram Nagar
		Raja Kheri
		Siwah

TABLE XXX—(Contd.)

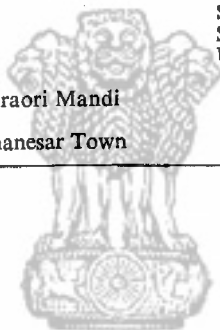
Head Office	Sub-Office	Branch Office
Karnal Head Office— (contd.)		Seenk (Sink) Shahpur Sutana Urlana
Panipat City		
Panipat Grand Trunk Road		Bapoli (Bapauli) Chhajpur (Chhajpur Kalan) Jalalpur Karar (Kurar) Sanoli (Sanauli) Ugra Khair (Ugra Kheri)
Panipat Mandi		
Panipat Model Town		Panipat Camp Panipat Cheap Colony Panipat Kutchery
Panipat Sugar Mills		
Patti Kalyana		Ahulana Atta Chulkana Dehra Dekadla (Dikadla) Hathwala (Hatwala) Kewana (Kiwana) Maholi (Mohali) Raksera (Rakashera)
Pehowa		Bakhli Bhorak Bodhni Gumthala Garhi (Gumthala Garhu) Karha (Karah) Malikpur (Malakpur) Ramgarh Rohar Siana Saidan (Sivana Sayadan) Seonsar Thana Urney (Urnai)
Pipli		Bodla Kalal Majra (Kalal Mazra) Kaulapur Khanpur Kolian Umri
Pundri		Barana Chochran (Chochra) Digh (Dig) Habri Sirsal Saunch (Sanch)

TABLE XXX—(Contd.)

Head Office	Sub-Office	Branch Office
Karnal Head Office— (contd.)	Radaur	Alhare Bakana Bapa Chamrori Gudha Gumthala Garhu (Gumthala Rao) Ghillaur (Ghillaur) Hartan Jathlana Khurdban Nachron
	Rajaund	Bilona (Bilauna) Deoban Durana (Daurana) Jakhauli Kheri Sharaf Ali Kasan Kachhana Mandwal Rahera (Rohera) Rehra (Rihara) Sangal Titram Thal
	Sainik School	Bara Gaon Gheir (Ghayar)
	Samalkha	Biholi (Baholi) Jorasi (Jaurasi Khalsa) Karhans Mansa Namunda (Namonda) Naraina
Sahahbad Grain Market		
	Shahbad Markanda	Babain Charooni Jatan (Churni Jattan) Digh (Dig) Gajlana Haripur Kalsana Kalyana (Kaliana) Khaundwa (Kharindwah) Landi (Landhi) Madanpur Nagla Rattangarh Rawa Ram Saran Majra Samalkhi Sanghaur (Singhaur) Sharifgarh (Sharifgarh Bakana) Tigri Yara

TABLE XXX—(Concl'd.)

Head Office	Sub-Office	Branch Office
Karnal Head Office— (concl'd.)	Shahbad Grand Trunk Road	
	Sewan (Siwan)	Bodla Guhna Ladana Baba Manas Mandi Saidan (Mandi) Sertha (Serta)
	Siwan Gate Kaithal	
	Taraori	Bhaini Khurd Keorak Jagir (Keorak) Padhana Ramana Ramani Shamgarh Saunkra (Saunkhra) Uchana
	Taraori Mandi	
	Thanesar Town	



सत्यमेव जयते

TABLE XXXI
Panchayats, Villages and Population in Blocks

Block	Number of <i>panchayats</i>	Number of villages	Population (1961)
Stage II			
Kaithal	61	67	1,27,435
Mad'auda	44	50	71,327
Rajaund	36	42	72,862
Nisang	53	65	80,869
Samalkha	27	29	46,446
Asandh	46	52	91,297
Post-Stage II			
Thanesar	74	131	1,05,340
Nilu Kheri (Nilo Kheri)	86	135	1,09,382
Gula (Guhla)	77	132	99,435
Panipat	76	105	1,59,175
Ladwa	112	216	1,02,582
Gharaunda	52	67	90,792
Shahabad (Shahbad)	89	123	92,467
Pundri	52	61	81,937
Karnal	82	144	72,962



TABLE XXXII

Courses conducted at the Extension Education Institute,
Nilu Kheri (Nilo Kheri)

(September 1959 to March 1970)

Particulars	Duration	Number of courses	Number of participants
1. Principals and Instructors of Gramsevak/Gram-sevika Training Centres	2 months	23	518
2. Integrated course for Agricultural Extension Officers and Animal Husbandry Extension Officers	6 weeks	13	213
3. Seminar on Teaching methods for faculty of Agriculture and Animal Husbandry colleges (including one Applied Nutrition Programme course)	4 weeks	3	54
4. Special course for Principals of Gramsevak Training Centres	2-3 weeks	2	41
5. Refresher courses for trained instructors	2 weeks	3	36
6. Agricultural Engineering courses	4 weeks	4	68
7. Farmers' Training course	2 weeks	1	11
8. Refresher courses for Senior Village Level Workers	2 months	44	961
9. Village Artisans courses for Agricultural Implements	1 year	13	181

सत्यमेव जयते

TABLE XXXIII
Incidence of Land Revenue

Year	On assessed area per acre					
	For total area			For cultivated area		
	Rs.	As.	Ps.	Rs.	As.	Ps.
1952	0	10	2	1	1	0
1953	0	11	2	1	1	9
1954	0	11	3	1	1	11
1955	0	11	3	1	2	11
1956	0	13	8	1	5	11
	Rs. Paise			Rs. Paise		
1957	0	87		1	37	
1958	0	80		1	25	
1959	0	69		1	08	
1960	0	84		1	27	
1961	0	84		1	27	
1962	1	21		1	81	
1963	0	94		1	31	
1964	1	06		1	45	
1965	0	87		1	36	
1966	0	92		1	24	
1967	0	95		1	14	
1968	0	68		0	85	
1969	1	15		1	41	

TABLE XXXIV

Income from Fixed and Fluctuating Land Revenue and Remission

Year ending Rabi	Previous years' balance	Demand	Total amount for recovery	Actual recoveries	Remission	Balance
	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
1961	1,57,433	15,30,656	16,88,089	13,03,134	1,93,920	1,91,035
1962	1,91,035	16,23,118	18,14,153	15,15,456	1,41,394	1,57,303
1963	1,57,303	15,36,985	16,94,288	12,33,405	3,65,482	95,401
1964	95,401	17,34,212	18,29,613	17,04,349	70,757	54,507
1965	54,507	13,52,628	14,07,135	12,23,344	1,34,399	49,392
1966	49,392	13,46,839	13,96,231	11,72,452	2,12,278	11,501
1967	11,501	13,42,468	13,53,969	12,07,476	1,12,820	33,673
1968	33,673	13,34,634	13,68,307	13,01,003	47,230	20,074
1969	20,074	13,33,173	13,53,247	12,21,537	1,30,644	1,066

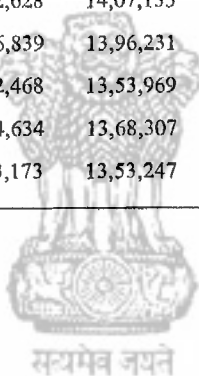
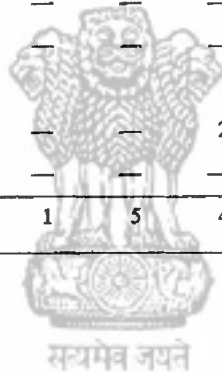


TABLE XXXV
Offences against Local and Special Laws

Year	Public nui- sance	Arms Act	Excise Act	Opium Act	Public Gamb- ling Act	Essen- tial Commo- dities Act	Rail- way Act	Pre- vention of Corrup- tion Act	Defence of India Rules
1955	11	96	574	19	95	3	6	6	—
1956	4	104	674	47	92	—	12	2	—
1957	7	66	717	74	73	24	6	20	—
1958	14	60	709	125	76	65	3	13	—
1959	9	65	746	131	22	68	1	3	—
1960	3	117	808	131	99	50	11	7	—
1961	4	141	837	116	82	22	2	6	—
1962	6	159	941	152	86	10	9	8	2
1963	—	35	1,088	193	112	16	3	5	35
1964	7	40	1,229	238	177	66	5	4	147
1965	1	89	1,773	182	168	96	7	5	63
1966	4	75	1,661	196	86	158	10	10	74
1967	3	167	1,546	230	129	235	20	5	—
1968	—	185	1,614	282	148	72	16	2	—
1969	—	171	1,920	332	168	17	14	3	—

TABLE XXXVI
Strength of the District Police (1970)

	Superin- tendent	Deputy Superin- tendents	Inspec- tors	Sub- Inspec- tors	Assistant Sub- Inspec- tors	Head Cons- tables	Cons- tables
Civil Police							
Permanent	1	3	2	31	54	105	841
Temporary	—	2	—	—	3	5	29
Armed Police and Mounted Police (1st, 2nd & 3rd Reserves)							
Permanent	—	—	—	1	1	7	64
Temporary	—	—	—	—	—	—	—
Prosecuting Staff							
Permanent	—	—	2	14	—	3	13
Temporary	—	—	—	—	—	—	—
Total :	1	5	4	46	58	120	947





सत्यमेव जयते

TABLE

Cases tried by

Kind of cases	1959	1960	1961	1962	1963
Civil Appeals	275	312	222	151	77
Civil Suits	3,595	2,718	1,965	2,126	2,059
Small Cause Court Cases	30	35	24	27	578
Execution regular	2,276	1,835	1,533	1,613	1,524
Execution Small Cause	9	8	9	9	7
Pauper Applications	17	12	10	8	14
Succession Certificates	62	63	48	62	47
Rent cases	408	422	391	321	412
Panchayat Revision	63	80	45	70	25
Panchayat Miscellaneous	79	72	56	125	95
Land Acquisition cases	18	8	23	6	21
Compensation Workman Act	13	13	10	16	14
Payment of Wages Act	11	13	9	4	23
Hindu Marriage Act	45	29	28	31	36
Tribunal	30	14	7	12	16
Minimum Wages Act	—	5	4	4	27

XXXVII

Civil Courts

1964	1965	1966	1967	1968	1969	Up to June 1970
148	109	340	7	10	29	4
2,606	1,794	3,581	3,232	4,339	5,797	4,342
774	793	846	3	3	15	3
1,378	873	2,452	1,645	1,863	1,735	1,074
8	5	2	1	—	—	—
9	17	7	—	—	—	—
50	44	57	49	50	57	13
312	218	424	287	402	297	107
55	60	27	10	25	29	3
102	110	85	40	45	40	7
—	—	—	—	—	—	—
19	20	13	14	15	18	3
25	18	15	—	—	—	—
28	25	30	39	43	22	10
14	12	10	—	—	—	—
20	16	18	—	—	—	—

TABLE
Income and Expenditure

Municipal Committee	1964-65		1965-66	
	Income	Expenditure	Income	Expenditure
	(Rs.)	(Rs.)	(Rs.)	(Rs.)
Karnal	10,42,594	9,82,125	10,13,787	11,77,620
Panipat	9,17,003	9,15,791	9,61,654	8,87,845
Kaithal	6,78,213	6,67,767	8,17,963	7,80,105
Thanesar	2,41,278	2,05,227	2,71,088	3,77,513
Shahabad (Shahbad)	2,14,852	2,17,358	2,07,430	2,25,268
Ladwa	1,57,499	1,25,790	1,32,204	1,51,131
Radaur	69,472	60,717	70,440	64,079
Pundri	16,992	19,388	16,387	14,398
Gharaunda	1,27,451	1,20,555	1,34,096	1,35,953
Pehowa	1,39,658	1,08,754	1,44,037	1,36,218
Nilu Kheri (Nilo Kheri)	64,479	96,163	1,06,949	1,11,765

सत्यमेव जयते

XXXVIII

of Municipal Committees

1966-67		1967-68		1968-69		1969-70	
Income	Expendi- ture	Income	Expendi- ture	Income	Expendi- ture	Income	Expendi- ture
(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Rs.)
12,07,829	11,46,403	15,66,712	12,91,120	18,98,324	22,05,451	21,86,546	21,22,156
11,31,374	11,15,558	13,96,617	13,39,783	13,82,650	14,87,403	15,57,933	16,29,110
7,54,125	7,48,638	8,88,874	9,55,160	10,42,599	10,10,624	19,33,776	19,27,834
2,93,529	2,85,888	3,61,557	3,33,650	6,50,145	5,09,070	6,70,123	9,09,736
2,26,888	2,34,770	2,58,516	2,54,260	3,29,889	3,19,569	4,29,147	4,31,396
1,48,827	1,73,463	1,72,941	1,71,147	2,25,960	2,26,687	4,50,061	4,52,648
66,141	67,777	70,177	69,843	1,24,030	93,783	1,15,776	1,23,051
16,450	16,604	15,262	17,104	23,306	20,762	37,566	26,756
1,24,663	1,27,050	1,59,909	1,58,190	1,45,504	1,42,714	2,77,191	2,77,281
1,33,032	1,30,829	1,70,667	1,72,308	3,16,690	2,98,670	3,40,713	3,21,783
1,08,919	93,762	94,942	1,02,978	1,01,755	1,01,303	1,55,369	1,56,286

सत्यमेव जयते

TABLE
Judicial work done

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
A.—Civil and Revenue Cases					
(i) Cases pending at the beginning of the year	624	617	555	516	478
(ii) Cases instituted	1,725	1,536	1,207	1,043	1,024
(iii) Cases received by transfer	45	39	74	43	37
(iv) Cases transferred from <i>panchayats</i> and cases returned for presentation to courts and <i>panchayats</i>	41	75	48	77	58
(v) Cases decided	1,736	1,562	1,271	1,047	828
(a) Dismissed	353	319	261	232	150
(b) Compounded	812	668	546	414	380
(c) Decreed	571	575	464	401	298
(vi) Cases pending at the end of the year	617	555	516	478	653
B.—Criminal Cases					
(i) Cases pending at the beginning of the year	398	396	375	342	221
(ii) Cases instituted	1,089	806	703	479	563
(iii) Cases received by transfer	117	114	113	53	35
(iv) Cases transferred from <i>panchayats</i> and returned for presentation to courts and <i>panchayats</i>	63	59	68	60	62
(v) Cases decided	1,145	882	781	593	433
(a) Dismissed	226	262	215	193	125
(b) Compounded	679	529	490	345	291
(c) Convicted	296	91	76	51	16
(vi) Cases pending at the end of the year	396	375	342	221	324

XXXIX

by Panchayats

1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
663	781	662	667	550	497	697	363
1,877	1,488	872	1,145	1,117	379	728	366
39	33	81	51	58	14	93	6
53	78	49	142	23	22	24	2
1,685	1,561	887	1,169	1,071	416	890	76
405	353	276	230	226	94	276	120
819	690	381	586	496	186	420	174
461	518	230	353	349	136	184	93
781	662	667	550	630	450	580	387
328	467	389	333	263	223	247	181
1,146	872	542	607	409	161	166	127
75	127	65	97	75	84	65	8
47	67	35	55	24	17	16	6
990	1,007	621	694	410	202	247	168
244	332	2,529	238	107	71	83	53
662	599	317	412	261	112	143	94
72	76	45	44	67	31	23	13
467	389	333	263	305	345	197	164

(Source : District Development and Panchayat Officer, Karnal)

TABLE
Development work done by

Particulars	1956-57	1957-58	1958-59	1959-60	1960-61
1. Public Health and Sanitation					
(i) Wells constructed	109	64	28	41	64
(ii) Buildings for hospitals and dispensaries	3	1	—	3	2
(iii) Buildings for veterinary dispensaries and first-aid centres	1	1	1	3	—
(iv) Maternity centres opened	4	—	—	—	—
2. Waste land opened (acres)	2,021	933	410	410	—
3. Land cleared from harmful weeds (acres)	1,06,507	35,643	25,846	1,02,225	96,688



XL

Panchayats

1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69
96	117	127	137	57	18	16	18
3	4	—	6	1	—	6	8
—	3	—	4	3	—	1	3
—	—	—	—	—	1	—	—
—	—	—	—	—	—	—	—
95,886	4,70,490	5,12,317	6,03,480	1,59,172	2,27,180	1,02,515	1,05,251

(Source : District Development and Panchayat Officer, Karnal)

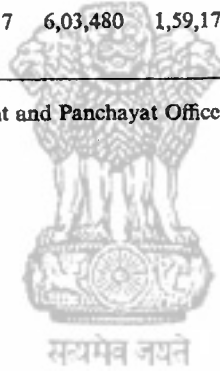


TABLE XLI

Blocks and the number of *Panchayats* and their *Panches*

Serial number	Name of Block	Number of <i>Panchayats</i>	Total number of members	Number of Harijan <i>panches</i>	Number of women <i>panches</i>
1.	Karnal	82	526	87	82
2.	Nilu Kheri (Nilo Kheri)	86	565	88	86
3.	Nisang	53	353	63	53
4.	Gharaunda	52	359	62	52
5.	Samalkha	27	197	39	27
6.	Panipat	77	532	81	77
7.	Madlauda	44	315	65	44
8.	Thanesar	74	478	118	74
9.	Shahabad (Shahbad)	89	550	132	89
10.	Ladwa	112	896	122	—
11.	Kaithal	61	424	61	61
12.	Gula (Guhla)	77	406	79	—
13.	Rajaund	36	267	61	—
14.	Asandh	46	333	46	46
15.	Pundri	52	365	65	52



सत्यमेव जयते

TABLE
Tahsilwise Number of

Tahsil	Higher Secondary Schools				High Schools			
	Urban		Rural		Urban		Rural	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
1965-66								
Karnal	7	1	2	—	17	6	7	—
Panipat	4	1	2	—	5	3	4	1
Thanesar	3	—	—	—	4	1	6	—
Kaithal	4	2	2	1	6	2	7	1
Total:	18	4	6	1	32	12	24	2
1966-67								
Karnal	7	1	2	—	17	7	16	—
Panipat	4	1	2	—	5	4	14	2
Thanesar	3	—	—	—	4	1	8	—
Kaithal	4	2	2	1	6	2	10	1
Total:	18	4	6	1	32	14	48	3
1967-68								
Karnal	6	1	2	—	17	7	16	—
Panipat	5	1	2	—	5	4	14	2
Thanesar	3	—	—	—	4	1	8	—
Kaithal	4	2	2	1	6	2	10	1
Total:	18	4	6	1	32	14	48	3
1968-69								
Karnal	6	1	2	—	17	6	17	—
Panipat	4	1	2	—	5	3	16	2
Thanesar	3	—	—	—	4	1	11	1
Kaithal	4	2	2	1	6	2	18	2
Total:	17	4	6	1	32	12	62	5
1969-70								
Karnal	6	1	2	—	17	6	21	—
Panipat	4	1	2	—	5	3	17	2
Thanesar	3	—	—	—	4	1	18	1
Kaithal	4	2	1	1	6	2	21	2
Total :	17	4	5	1	32	12	77	5

XLII

Schools

Middle Schools				Primary Schools				Junior Basic Schools	
Urban		Rural		Urban		Rural		Rural	
Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
—	1	32	6	16	—	221	—	51	—
—	—	18	3	9	—	137	—	20	—
—	—	26	4	13	—	166	—	34	—
—	—	29	4	12	—	201	—	48	—
—	1	105	17	50	—	725	—	153	—
—	1	32	6	16	—	207	—	54	—
—	—	18	3	9	—	125	—	19	—
—	—	26	4	13	—	150	—	37	—
—	—	29	4	12	—	174	—	43	—
—	1	105	17	50	—	656	—	153	—
—	1	32	4	16	—	208	—	48	—
—	1	16	3	9	—	122	—	22	—
—	—	22	2	13	—	127	—	33	—
—	—	31	6	12	—	188	—	44	—
—	2	101	15	50	—	645	—	147	—
—	1	31	4	16	—	201	—	45	—
—	—	17	3	9	—	131	—	22	—
—	—	22	3	13	—	124	—	33	—
—	1	35	6	12	—	177	—	42	—
—	2	105	16	50	—	633	—	142	—
—	1	31	4	16	—	201	—	45	—
—	1	17	3	9	—	131	—	22	—
—	—	22	3	13	—	124	—	33	—
—	—	36	6	12	—	173	—	42	—
—	2	106	16	50	—	629	—	142	—

TABLE XLIII

Courses conducted at the National Dairy Research Institute, Karnal and Southern Regional Station, Bangalore

Name of the course	Duration	Centre	Specialization
1. M.Sc. (Dairying) Panjab University	2 years	Karnal	Dairy Chemistry, Economics, Extension, Husbandry, Microbiology and Dairy Technology
2. B.Sc. in Dairying, Panjab University	5 years	Karnal	Dairy Husbandry and Dairy Technology
3. Diploma in Dairy Engineering	9 months	Karnal	
4. Ph. D. by Research	2 years	Karnal Bangalore	All branches of dairy science
5. Dairy Extension	3 months	Karnal Bangalore	
6. Dairy Plant Management	—	Karnal Bangalore	In association with Indian Institute of Management Ahmedabad
7. Tutorial Workshops	—	Karnal Bangalore	
8. Summer Institutes	—	Karnal Bangalore	
9. Indian Dairy Diploma	2 years	Bangalore	Dairy Husbandry and Dairy Technology
10. Short course in Milk Production	3 months	Bangalore	
11. Short course in Milk Plant Operations	3 months	Bangalore	

TABLE XLIV
Allopathic Hospitals and Dispensaries

Name of the institution	Doctors	Beds
Hospitals (Government)		
1. Civil Hospital, Karnal	10	200
2. Civil Hospital, Kaithal	3	50
3. Civil Hospital, Panipat	4	50
4. Referral Hospital, Kurukshetra	4	50
5. Civil Hospital, Shahabad (Shahbad)	1	16
6. Maternity Hospital, Radaur	1	14
Hospitals (Private)		
7. Shree Sanatan Dharam Mahabir Dal Free Eye, Maternity and Family Planning Hospital, Karnal	1	50
8. Shree Sewa Samiti Free Hospital, Karnal	1	2
Clinics (Government)		
1. T.B. Clinic, Karnal	1	22
2. School Health Clinic, Karnal	—	—
Dispensaries (Urban-Government)		
1. Mahila Ashram Dispensary, Karnal	1	—
2. Ram Nagar Dispensary, Karnal	1	—
Dispensaries (Canal)		
3. Binjhaul	—	—
4. Mundhari	—	—
5. Munak	—	—
Dispensary (E.S.I.)		
6. Panipat	2	—
Dispensaries (Provincialised Rural)		
7. Naultha	1	4
8. Madlauda	1	—
9. Tirawari (Taraori)	1	4
10. Jundla	1	2

TABLE XLIV—(Contd.)

Name of the institution	Doctors	Beds
11. Babain	1	4
12. Thaska Miranji	1	4
13. Chhatar	—	—
14. Kutail	—	8
Dispensary (Subsidised)		
15. Fatehpur	—	—
Dispensaries (Zila Parishad)		
16. Karnal	1	—
17. Kunjpura	1	2
18. Ladwa	1	10
19. Pundri	1	12
20. Thanesar	1	12
Primary Health Centres (Government)		
1. Bapauli	1	8
2. Ahar	1	8
3. Gharaunda	1	8
4. Indri	1	8
5. Nisang	1	8
6. Radaur	1	8
7. Jhansa	1	8
8. Kaul	1	8
9. Siwan	1	8
10. Asandh	1	10
11. Gula (Guhla)	1	8
12. Pehowa	1	8
13. Samalkha	2	12
14. Nilu Kheri (Nilo Kheri)	2	28
15. Ballah	1	8
16. Rajaund	1	8
Maternity and Child Welfare Centres (Red Cross)		
1. Karnal		
2. Panipat		

TABLE XLIV—(Contd.)

3. Shahabad (Shahbad)

4. Kaithal

Family Planning Clinics (Govenment)

Civil Hospitals

1. Karnal
2. Panipat
3. Kaithal
4. Shahabad (Shahbad)
5. Kurukshetra

Civil Dispensaries

6. Kunjpura
7. Ladwa
8. Pundri
9. Thanesar

Rural Dispensaries

10. Tirawari (Taraori)
11. Babain
12. Jundla
13. Chhatar
14. Madlauda
15. Naultha
16. Thaska Miranji

Primary Health Centres

17. Gharaunda
18. Bapauli
19. Samalkha
20. Ahar
21. Ballah
22. Asandh
23. Nisang
24. Rajaund
25. Siwan
26. Jhansa
27. Gula (Guhla)
28. Pehowa
29. Kaul
30. Nilu Kheri (Nilo Kheri)
31. Indri
32. Radaur

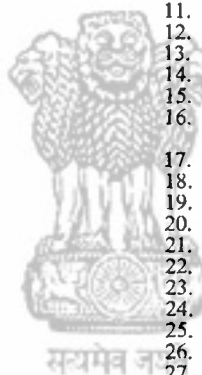


TABLE XLIV—(Concl'd.)

Tahsil	Government/Municipal Ayurvedic Dispensaries
Panipat	1. Dehra 2. Kurar 3. Israna 4. Adyana 5. Sink
Karnal	6. Gagsina 7. Shekhopura Sikri 8. Sambhli
Thanesar	9. Hartan 10. Lukkhi 11. Gumthala Rao 12. Dhaulra
Kaithal	13. Naguran 14. Salwan 15. Keorak 16. Pharal 17. Jandaula 18. Dig 19. Dhatrat 20. Habri
Guhla	21. Arnauli 22. Gumthala Garhu 23. Seonsar 24. Bhagal 25. Kharak
Unani Dispensaries	
Kaithal	1. Salwan
Guhla	2. Arnauli
Karnal	3. Sambhli
Thanesar	4. Hartan

TABLE XLV
Deaths caused by different Diseases, Fevers, etc.

Year	Cholera	Small- pox	Plague	Fevers	Dysen- tery and Eiar- rhoea	Respira- tory diseases	All other causes	Total
1950	34	134	—	16,448	121	894	863	18,494
1951	10	16	—	13,193	102	840	1,009	15,170
1952	1	24	—	15,650	134	962	1,151	17,922
1953	5	115	—	19,299	156	1,009	1,261	21,845
1954	—	50	—	13,122	110	1,276	1,484	16,042
1955	—	13	—	10,644	157	2,912	1,626	15,352
1956	—	5	—	12,680	188	3,969	1,833	18,675
1957	—	4	—	11,300	153	4,053	1,788	17,298
1958	3	41	—	15,014	214	2,720	1,914	19,906
1959	—	6	—	10,917	130	1,576	2,390	15,019
1960	1	5	—	14,879	128	1,402	1,654	18,069
1961	—	31	—	12,479	175	751	1,216	14,658
1962	—	42	—	11,824	162	1,751	1,669	15,448
1963	—	30	—	10,001	44	1,763	719	12,557
1964	—	3	—	10,747	104	2,272	1,693	14,819
1965	—	9	—	11,394	51	615	1,332	13,637
1966	2	21	—	12,508	42	637	1,655	14,896
1967	—	45	—	10,823	250	1,171	1,574	13,863
1968	—	5	—	10,803	33	514	2,006	13,361
1969	—	7	—	8,771	27	2,427	1,943	13,175
1970	—	1	—	8,417	30	2,163	2,760	13,371

TABLE XLVI

Incidence of Smallpox and Preventive Measures taken for its Eradication

Year	Cases	Deaths	Localities infected	Primary vaccination	Revaccination
1950	732	134	95	46,078	2,22,917
1951	115	16	14	39,190	81,868
1952	143	24	24	45,857	96,472
1953	693	115	105	49,764	2,02,460
1954	377	50	55	55,686	1,99,076
1955	95	13	14	47,945	1,58,094
1956	47	5	11	53,136	96,874
1957	49	3	10	52,961	1,49,318
1958	532	41	73	57,268	2,10,779
1959	52	6	12	55,675	1,24,403
1960	82	5	16	51,614	1,29,633
1961	544	31	98	60,242	2,04,085
1962	1,266	146	225	39,304	2,22,188
1963	179	30	31	57,548	2,99,977
1964	35	3	6	48,896	69,730
1965	43	9	13	69,439	67,516
1966	310	21	68	69,848	2,07,227
1967	423	45	30	57,416	2,60,634
1968	48	5	7	92,199	81,380
1969	51	7	13	1,00,628	1,57,363
1970	16	1	7	97,943	1,53,185

TABLE XLVII
D.D.T. Spraying

Year		Villages sprayed	Areas covered (square miles)	Houses sprayed	Population protected
1958	Ist Round	710	1,713.50	1,37,505	8,09,766
	IInd Round	427	951.40	73,642	3,92,313
1959	Ist Round	996	2,520.00	1,55,357	9,60,508
	IInd Round	823	1,916.24	1,06,815	6,60,465
1960	Ist Round	1,001	2,520.00	1,69,712	8,93,849
	IInd Round	1,001	2,520.00	1,77,996	8,93,849
1961	Ist Round	1,001	2,520.00	1,70,070	11,88,264
	IInd Round	1,001	2,520.00	1,71,575	11,88,264
	IIInd Round	75	570.00	10,688	91,954
1962	Focal and Flood	21	56.73	5,347	35,673
1963) to) 1965)	—	—	—	—	—
1966	Focal and Flood	22	37.00	2,209	12,301
1967	Ditto	51	505.00	4,572	28,724
1968	Ditto	156	203.00	93,778	1,26,619
1969	Ist Round	372	618.00	1,09,076	6,18,341
	IInd Round	372	618.00	1,14,525	6,18,541
	Focal spray	170	121.00	20,462	53,676
1970	Ist Round	567	1,085.00	1,52,795	8,05,380
	Single Round	60	119.00	17,209	1,05,031
	Focal spray	235	61.00	15,102	14,753
	IInd Round	517	959.00	1,47,387	7,58,108

TABLE XLVIII
UNICEF Milk Feeding Centres

Serial Number	Feeding Centres
1.	Maternity and Child Health Centre, Kaithal
2.	Primary Health Centre, Pehowa
3.	Primary Health Centre, Gula (Guhla)
4.	Primary Health Centre, Asandh
5.	Primary Health Centre, Rajaund
6.	Primary Health Centre, Siwan
7.	Primary Health Centre, Kaul
8.	Maternity and Child Health Centre, Shahabad (Shahbad)
9.	Primary Health Centre, Radaur
10.	Primary Health Centre, Jhansa
11.	Maternity and Child Health Centre, Karnal
12.	Primary Health Centre, Nilu Kheri (Nilo Kheri)
13.	Primary Health Centre, Gharaunda
14.	Primary Health Centre, Indri
15.	Primary Health Centre, Nisang
16.	Primary Health Centre, Kutail
17.	Primary Health Centre, Ballah
18.	Maternity and Child Health Centre, Panipat
19.	Primary Health Centre, Ahar
20.	Primary Health Centre, Samalkha
21.	Primary Health Centre, Bapauli

TABLE XLIX
Prevention of Adulteration in Foodstuffs

	1966	1967	1968	1969
Total number of samples seized	542	1,089	1,240	800
Samples sent to Public Analyst	542	1,089	1,240	800
Samples found adulterated	136	377	444	244
Prosecutions launched	156	383	437	254
Fine realised (rupees)	8,890	20,870	57,411	49,410
Number of persons sent to jail	16	145	187	105

TABLE L
Important Labour Laws

Subject matter	Name of Act	Whether Central or State Act	Main Provisions
Working conditions, industrial safety, hygiene and welfare inside the place of work	(1) The Factories Act, 1948	Central Act	Elaborate provisions have been made in the Act regarding the conditions of work inside the factories including hours of work, employment of young persons, leave with wages, occupational diseases, safeguard for health, promotion of safety and welfare of workers and special provision for young persons and women. Welfare measures like first-aid appliances, canteens, creches, cool drinking water, etc., near the places of work have also been provided under the Act.
	(2) The Employment of Children Act, 1938	Central Act	The Act prohibits employment of children below the age of 15 years in any occupation connected with the transport of passengers, goods or mail by railways or connected with a port authority within the limits of any port. It also prohibits employment of children in the workshops connected with bidi-making, carpet-weaving, cement manufacture (including bagging of cement), cloth printing, dyeing and weaving, manufacture of matches, explosives and fire-works, mica cutting and splitting, shellac manufacture, soap manufacture, tanning and wool cleaning.
	(3) The Punjab Shops and Commercial Establishments Act, 1958	State Act	The Act regulates conditions of work and terms of employment of workers engaged in shops and commercial establishments and in those industrial establishments which are not covered under the Factories Act, 1948. It covers hours of work, holidays, leave, wages, employment of children and their working hours, closing and opening hours, health, safety, maternity benefits and welfare.
Wages	(1) The Payment of Wages Act, 1936	Central Act	The Act regulates timely payment of wages without any unauthorised deductions
	(2) The Minimum Wages Act, 1948	Central Act	The Act provides for fixation of minimum wages, working hours, weekly rest, etc.
Industrial relations	(1) The Industrial Disputes Act, 1947	Central Act	The Act provides for settlement of industrial disputes, lay-off payment and payments at the time of retrenchment.

TABLE I—(Contd.)

Subject matter	Name of Act	Whether Central or State Act	Main provisions
	(2) The Industrial Employment (Standing Orders) Act, 1946	Central Act	The Act requires employees to make standing orders defining terms of employment of workers on specified matters and to get them. certified by the Certifying Officer.
Trade unions	The Indian Trade Unions Act, 1926	Central Act	The Act makes provisions for the registration of trade unions and describes the rights, privileges, obligations and liabilities of registered trade unions.
Social security	(1) The Workmen's Compensation Act, 1923	Central Act	The Act provides for payment of compensation to workmen in the case of injury caused by an accident arising out of and in the course of employment. It also provides for payment of compensation for certain occupational diseases.
	(2) The Employees' State Insurance Act, 1948	Central Act	The Act provides for five types of benefits to the employees, viz., sickness benefit, maternity benefit, disablement benefit, dependents' benefit and medical benefit.
	(3) The Employees' Provident Funds Act, 1952	Central Act	The Act seeks to make a provision for the future of industrial worker after he retires or is retrenched or for his dependents in case of his early death.
	(4) The Maternity Benefit Act, 1961	Central Act	The Act provides for payment of cash benefit to women workers for specified periods before and after child birth and for other incidental matters.
	(5) The Punjab Labour Welfare Fund Act, 1965	State Act	All unpaid accumulations of workers have to be paid to Labour Welfare Board, constituted for the purpose by the State Government, which shall keep a separate account to be utilised by it for defraying the cost of carrying out measures for promoting the welfare of the labour and their dependents.
Housing	The Punjab Industrial Housing Act, 1956	State Act	The Act provides for the administration, allotment, realisation of rent, etc., in connection with quarters constructed under the Subsidized Industrial Housing Scheme.
New Bonus	The Payment of Bonus Act, 1965	Central Act	Every establishment whether running in profit or loss is required to pay bonus @ 4 per cent or Rs. 40 whichever is greater.

TABLE—(Concd.)

Subject matter	Name of Act	Whether Central or State Act	Main provisions
Leave	The Punjab Industrial Establishments (National and Festival Holidays and Casual and Sick leave) Act, 1965	State Act	Every establishment has to allow to its employees, the following :— National holidays 3 (i.e. 26th January, 15th August and 2nd October) Festival holidays 4 Casual leaves 7 Sick leaves 14
Welfare of transport workers	Motor Transport Workers Act, 1961	Central Act	The Act provides for the welfare of motor transport workers and regulates the conditions of their work. It applies to every motor transport undertaking employing five or more workers.



TABLE LI
Registered Trade Unions

(On 31-3-1970)

Serial number	Name of the Union
1.	National Dairy Research Institute Employees and Workmen Union, Karnal
2.	National Dairy Research Institute Workers Union, Karnal
3.	Indian Agricultural Research Institute Employees and Workmen Union, Karnal
4.	The Karnal Agricultural Research Sub Station Technical Class IV Mazdoor Union, Karnal
5.	Sugar Cane Sub Station Workers Union, Karnal
6.	Punjab Pradesh Bank Workers Federation, Karnal
7.	Government Medical Store Depot Employees Union, Karnal
8.	Khetihar Mazdoor Congress, Karnal
9.	Karnal Distillery Workers Union, Karnal
10.	Karnal Press Workers Union, Karnal
11.	District Tonga Rehra Workers Union, Karnal
12.	The Karnal General Transport Workers Union, Karnal
13.	District Municipal Subordinate Union, Karnal
14.	District Motor Transport Workers Union, Karnal
15.	Government Medical Store Depot Workers Union, Karnal
16.	Scheduled Caste Workers and Employees Union, Karnal
17.	National Dairy Research Institute Karamchari Union, Karnal
18.	District Goods Transport Workers Union, Karnal
19.	Sweepers Union, Karnal
20.	Municipal Karamchari Union, Karnal
21.	Karnal Rice, Oil, Cotton and Flour Mills Workers Union, Karnal
22.	Karnal Mechanical and General Labour Union, Karnal
23.	Indian Motor Transport Workers Union, Karnal
24.	Four Wheeler Tempo Workers Union, Karnal
25.	Haryana Tube-well Mechanical Workers Union, Karnal
26.	Municipal Employees Union, Kaithal
27.	Karnal Electric Supply Company Employees Union, Kaithal
28.	Municipal Karamchari Union, Kaithal
29.	The Association of the Punjab National Bank Employees, Panipat
30.	Sugar Mills Karamchari Union, Panipat
31.	The Panipat Sugar Mills Mazdoor Sabha, Panipat
32.	Woollen Workers Union, Panipat
33.	Woollen Mazdoor Sabha, Panipat
34.	The Wool Khadi Workers Union, Panipat
35.	Engineering and Foundry Workers Union, Panipat
36.	Panipat Rickshaw Pullers and Workers Union, Panipat
37.	Punjab Bank Workers Organisation, Panipat
38.	Industrial Workers Union, Panipat
39.	Textile Mazdoor Sangh, Panipat
40.	Sugar Mills Mazdoor Sangh, Panipat

TABLE LI—(Concl'd.)



TABLE LII
Strikes by the Workers

(During 1-11-1966 to 31-3-1970)

Serial number	Name of the factory	Number of strikes with date	Number of days on which the workers remained on strike	Number of workers involved in the strike	Number of man-days lost during the strike
1.	Government Engineering Workshop, Nilu Kheri (Nilo Kheri)	1 (10-4-1967 to 30-4-1967)	17	150	2,550
2.	M/s Solvex Oil & Fertilizer, Karnal	1 (29-8-1968 to 1-9-1968)	3	38	114
Total :			20	188	2,664

TABLE LIII

Constituencies and the number of valid votes polled for election to Lok Sabha in the Karnal district during the First General Elections, 1952

Name of constituency	Extent of constituency	Total number of seats	Total number of electors	Total number of valid votes polled	Percentage of column 5 to column 4
1	2	3	4	5	6
Karnal	Karnal district, Jagadhri tahsil, Molana <i>thana</i> and Ambala Sadar <i>thana</i> (excluding Panjokhra and Ambala <i>zails</i>) of Ambala tahsil of Ambala district.	2	15,30,064	8,42,919	55.09

TABLE LIV

Constituencies and the number of votes polled for election to Vidhan Sabha in the Karnal district during the First General Elections, 1952

Name of constituency	Extent of constituency	Number of seats	Total number of electors	Number of electors who voted	Percentage of column 5 to column 4
1	2	3	4	5	6
Samalkha	Samalkha <i>thana</i> and Patti Kalyana part <i>zail</i> of Panipat Sadr <i>thana</i> and Naultha <i>zail</i> of Urlana Kalan <i>thana</i> of Panipat tahsil	1	50,787	39,017	76.82
Panipat	Panipat City and Sadr (Excluding Patti Kalyana part <i>zail</i>) <i>thana</i> of Panipat tahsil	1	58,710	29,499	50.24
Karnal	Karnal City and Sadr (excluding Bara Gaon, Jundla and Ramba (part <i>zails</i>) <i>thanas</i> of Karnal tahsil	1	57,408	25,376	44.20
Asandh	Asandh and Rajaund <i>thanas</i> of Kaithal tahsil	1	56,937	39,684	69.69
Gharaunda	Urlana Kalan <i>thana</i> (excluding Naultha <i>zail</i> of Panipat tahsil ; and Gharaunda <i>thana</i> of Karnal tahsil	1	53,118	36,628	68.95
Butana	Indri, Nisang and Butana <i>thanas</i> and Bara Gaon, Jundla and Ramba (part <i>zails</i>) of Karnal Sadr <i>thana</i> of Karnal tahsil ; Radaur <i>thana</i> and Khurdban (part <i>zail</i>) of Ladwa <i>thana</i> of Thanesar tahsil	2 (One reserved)	1,08,099	1,17,948	54.55
Thanesar	Thanesar (including Kurukshetra Camp) and Ladwa (excluding Khurdban part <i>zail</i>) <i>thanas</i> of Thanesar tahsil	1	69,951	20,664	29.54
Shahbad	Shahbad and Thaska Miranji Sahib <i>thanas</i> of Thanesar tahsil ; and Bakhli and Sarsa <i>zail</i> of Pehowa <i>thana</i> of Kaithal	1	48,187	26,384	54.75
Kaithal	Guhla and Kaithal <i>thanas</i> and Keorak (part <i>zail</i>) of Pehowa <i>thana</i> of Kaithal tahsil	1	50,666	32,817	64.77
Pundri	Pundri <i>thana</i> and Gumthala Gadhu <i>zail</i> of Pehowa <i>thana</i> of Kaithal tahsil	1	46,404	32,542	70.12

TABLE LV

Constituencies and the number of valid votes polled for election to Lok Sabha
in the Karnal district during the Second General Elections, 1957

Name of constituency	Extent of constituency	Total number of seats	Total number of electors	Total number of valid votes polled	Percentage of column 5 to column 4
1	2	3	4	5	6
Kaithal	Jind Assembly, Kaithal, Pehowa, Pundri, Rajaund and Butana Assembly constituencies.	1	4,02,728	2,56,120	63.59



TABLE LVI

Constituencies of the Karnal district for election to Vidhan Sabha, the number of valid votes polled, etc., during the Second General Elections, 1957

Name of constituency	Extent of constituency	Total number of seats	Number of electors	Total number of votes	Total number of valid votes polled	Percentage of column 6 to column 5
1	2	3	4	5	6	7
Thanesar	Thanesar tahsil (excluding Thaska Miranji Saheb <i>thana</i>) and Indri <i>thana</i> and Bhara-gaon <i>zail</i> in Karnal Sadr <i>thana</i> in Karnal tahsil	2	1,20,833	2,41,666	1,42,107	58.80
Pehowa	Pehowa and Gohela <i>thanas</i> and Kaithal <i>thana</i> (excluding Kaithal Municipality and Kaithal <i>zail</i>) in Kaithal tahsil; and Thaska Miranji Saheb <i>thana</i> , in Thanesar tahsil	1	64,487	64,487	34,875	54.08
Kaithal	Kalayat Kanungo circle (excluding Patwar circles No. 11 to 14) in Narwana tahsil of Sangrur district; and Kaithal municipality and Kaithal <i>zail</i> in Kaithal <i>thana</i> in Kaithal tahsil of Karnal district	1	61,181	61,181	39,903	65.22
Pundri	Asandh <i>thana</i> and Pundri municipality and Pundri <i>zail</i> , in Pundri <i>thana</i> in Kaithal tahsil	1	46,767	46,767	28,951	61.90
Rajaund	Rajaund <i>thana</i> and Pai <i>zail</i> in Pundri <i>thana</i> in Kaithal tahsil	1	66,306	66,306	48,087	72.52
Karnal	Karnal municipality and Karnal, Jundla and Ramba part- <i>zails</i> in Karnal Sadar <i>thana</i> in Karnal tahsil	1	50,536	50,536	34,105	67.49
Gharaunda	Gharaunda <i>thana</i> and Kutail <i>zail</i> in Karnal Sadr <i>thana</i> in Karnal tahsil; and Bhalsi <i>zail</i> in Urlana Kalan <i>thana</i> in Panipat tahsil	1	53,343	53,343	34,841	65.32
Panipat	Panipat City and Panipat Sadr <i>thanas</i> in Panipat tahsil	1	56,524	56,524	39,299	69.53
Samalkha	Samalkha <i>thana</i> and Urlana Kalan <i>thana</i> (excluding Bhalsi <i>zail</i> in Panipat tahsil)	1	59,391	59,391	46,188	77.77
Butana	Butana and Nisang <i>thanas</i> in Karnal tahsil	1	58,064	58,064	33,822	58.25

TABLE LVII

Constituencies and the number of valid votes polled in the Karnal district for election to Lok Sabha during the Third General Elections, 1962

Name of constituency	Extent in terms of Assembly constituencies	Total number of seats	Total number of electors	Number and percentage of electors who voted		Total number of candidates	Total number of valid votes polled
				Number	Percentage		
1	2	3	4	5	6	7	8
Karnal	Jagadhri* Thanesar Radaur Karnal Gharaunda Panipat Samalkha	1	4,77,020	2,27,861	68.73	5	3,16,066
Kaithal	Butana Pehowa Kaithal Narwana** Rajaund Jind** Pundri	1	5,18,275	3,60,791	69.61	6	3,45,929

*This Assembly Constituency falls in Ambala district but has been included in the Karnal Parliamentary Constituency.

**These Assembly Constituencies fall in Sangrur district but have been included in the Kaithal Parliamentary Constituency.

TABLE LVIII

Constituencies of the Karnal district for election to Vidhan Sabha, the number of valid votes polled, etc., during the Third General Elections, 1962

Name of constituency	Total number of electors	Number and percentage of electors who voted		Total number of contesting candidates	Party affiliation	Number of valid votes polled by each candidate	Total number of valid votes polled in the constituency
		Number	Percentage				
1	2	3	4	5	6	7	8
Thanesar	67,534	49,600	73.44	8	Independent	447	47,273
					Independent	765	
					Congress	15,726	
					Jan Sangh	15,511	
					Swatantra	7,418	
					Independent	2,607	
					Praja Socialist	2,832	
Radaur (Scheduled Castes)	76,273	47,485	62.26	9	Communist	1,967	44,688
					Jan Sangh	16,495	
					Independent	699	
					Republican	1,115	
					Independent	1,220	
					Independent	794	
					Independent	1,814	
Karnal	56,130	36,992	65.90	4	Congress	18,092	35,775
					Swatantra	1,560	
					Independent	2,899	
					Independent	351	
					Jan Sangh	14,851	
Butana	72,561	50,935	70.21	7	Congress	19,679	48,322
					Republican	894	
					Communist	7,703	
					Independent	1,524	
					Independent	3,953	
					Independent	1,929	
					Congress	18,094	
Pehowa	1,02,468	65,836	64.25	5	Independent	1,003	61,847
					Swatantra	14,116	
					Independent	18,425	
					Congress	26,321	
					Jan Sangh	12,278	
Kaithal	73,923	52,522	71.05	3	Independent	3,946	49,640
					Independent	877	
					Swatantra	11,862	
					Congress	22,183	
Rajaund	79,180	59,625	75.30	9	Jan Sangh	15,595	57,292
					Independent	3,574	
					Independent	198	
					Swatantra	633	
						20,607	

TABLE LVIII—(Concl'd.)

Name of constituency	Total number of electors	Number and percentage of electors who voted		Total number of contesting candidates	Party affiliation	Number of valid votes polled by each candidate	Total number of valid votes polled in the constituency
		Number	Percentage				
					Jan Sangh	1,872	
					Independent	842	
					Congress	29,095	
					Independent	322	
					Independent	149	
Pundri	56,852	40,263	70.82	6	Congress	11,258	38,586
					Communist	1,164	
					Independent	3,494	
					Independent	1,162	
					Independent	18,753	
					Independent	2,753	
Gharaunda	63,414	46,050	72.62	3	Congress	17,674	43,539
					Ram Rajya Parishad	2,701	
					Swatantra	23,164	
Panipat	69,158	49,308	71.30	7	Republican	368	47,146
					Swatantra	1,458	
					Congress	19,635	
					Jan Sangh	19,939	
					Communist	3,578	
					Independent	1,941	
					Independent	227	
Samalkha	69,641	53,010	76.1	4	Congress	29,119	51,339
					Swatantra	20,943	
					Independent	896	
					Independent	381	

TABLE LIX

Constituencies and the number of valid votes polled for election to Lok Sabha in the Karnal district during the Fourth General Elections, 1967

Name of constituency	Extent in terms of Assembly constituencies	Total number of seats	Total number of electors	Total number of valid votes polled	Percentage of column 5 to column 4
1	2	3	4	5	6
Karnal	(12) Babain (13) Nilokheri (14) Indri (15) Karnal (16) Jundla (17) Gharaunda (18) Samalkha (19) Panipat (20) Naultha	1	4,63,594	3,36,205	72.52
Kaithal	(10) Shahbad (11) Thanesar (21) Rajaund (22) Pundri (23) Sherhada (24) Kaithal (25) Pehowa (26) Kalayat* (27) Narwana*	1	4,84,420	3,57,691	73.84

*These Assembly Constituencies fall in Jind district but have been included in the Kaithal Parliamentary Constituency.

TABLE IX
Constituencies of the Karnal district for election to Vidhan Sabha, the number of valid votes polled, etc., during the Fourth General Elections, 1967

Name of constituency	Total number of electors	Number and percentage of electors who voted		Total number of contesting candidates	Party affiliation	Number of valid votes polled by each candidate	Total number of valid votes polled in the constituency
		Number	Percentage				
1	2	3	4	5	6	7	8
Shahbad	44,788	34,135	76.21	5	Congress Jan Sangh Independent Independent Independent	11,074 10,778 8,664 896 452	31,864
Thanesar	48,691	37,770	77.57	5	Congress Jan Sangh Independent Independent Samyukta Socialist	18,659 14,822 843 793 434	35,551
Babain (S.C.)	49,862	38,062	76.32	3	Congress Jan Sangh Independent	21,884 11,724 2,407	36,015
Nilokheri	44,039	33,284	75.58	5	Jan Sangh Independent Congress Republican Independent	10,605 9,294 8,030 2,853 587	31,369
Indri	51,738	39,004	75.39	7	Congress Jan Sangh Independent Independent Communist (M) Republican Independent	17,056 5,885 4,969 3,325 3,286 1,705 125	36,351
Karnal	51,136	39,011	76.29	6	Jan Sangh Congress Independent Independent Independent Independent	11,702 9,215 9,080 5,176 1,924 196	37,293
Jundla (S.C.)	50,145	33,376	66.56	7	Congress Republican Independent Independent Independent Independent Independent	10,843 10,696 4,510 2,844 1,151 955 256	31,255

TABLE LX—(Concl'd.)

Name of constituency	Total number of electors	Number and percentage of electors who voted		Total number of contesting candidates	Party affiliation	Number of valid votes polled by each candidate	Total number of valid votes polled in the constituency
		Number	Percentage				
1	2	3	4	5	6	7	8
Gharaunda	56,442	43,657	77.35	4	Congress Jan Sangh Independent Communist (M)	13,906 12,736 10,053 3,879	40,574
Samalkha	56,590	42,804	75.64	5	Jan Sangh Congress Independent Republican Independent	12,215 12,101 9,327 5,108 995	39,746
Panipat	54,919	43,037	78.36	4	Jan Sangh Congress Communist Independent	20,459 18,134 1,864 702	41,159
Naultha	48,723	37,838	77.67	9	Congress Independent Independent Independent Independent Independent Republican Independent Independent	12,943 9,504 3,461 2,915 2,272 1,932 1,391 898 303	35,619
Rajaund (S.C.)	60,950	44,301	72.68	7	Congress Swatantra Independent Communist Independent Independent Independent	16,999 10,935 7,832 2,338 1,444 793 312	40,653
Pundri	52,792	43,146	81.72	4	Congress Independent Independent Independent	20,143 13,670 5,322 1,939	41,074
Sherhāda	54,771	43,563	79.54	6	Independent Congress Independent Swatantra Independent Independent	12,080 11,641 6,264 6,026 3,452 986	40,449
Kaithal	56,724	44,258	78.02	3	Congress Swatantra Independent	21,933 20,015 590	42,538
Pehowa	57,305	40,664	70.96	6	Swatantra Congress Independent Communist Independent Independent	13,010 11,117 7,391 5,160 637 429	37,744

TABLE LXI

Constituencies of the Karnal district for election to Vidhan Sabha, the number of valid votes polled, etc., during the Mid-Term Elections, 1968

Name of constituency	Total number of electors	Number and percentage of electors who voted		Total number of contesting candidates	Party affiliation	Number of valid votes polled by each candidate	Total number of valid votes polled in the constituency
		Number	Percentage				
Shahbad	46,256	27,236	58.88	3	Congress Vishal Haryana Jan Sangh	10,215 8,583 7,733	26,531
Thanesar	51,244	30,963	60.42	3	Congress Jan Sangh Republican	14,473 14,089 1,558	30,120
Babain (S.C.)	52,617	27,115	51.53	7	Independent Congress Independent Vishal Haryana Independent Independent Independent	13,535 9,242 1,511 1,067 464 411 261	26,491
Nilokheri	46,172	31,106	67.37	3	Independent Congress Jan Sangh	15,155 8,617 6,572	30,344
Indri	53,554	31,769	59.32	5	Congress Independent Vishal Haryana Jan Sangh Swatantra	10,846 8,060 5,413 4,472 2,054	30,845
Karnal	52,295	32,949	63.04	4	Bhartiya Kranti Dal Jan Sangh Congress Independent	6,162 8,285 7,127 10,648	32,222
Jundla (S.C.)	51,441	26,720	51.94	4	Republican Congress Independent Independent	14,253 10,642 661 483	26,039
Gharaunda	57,691	33,642	58.31	9	Independent Independent Independent Independent Vishal Haryana Jan Sangh Congress Swatantra Communist (M)	1,226 513 1,082 409 2,594 7,766 7,653 7,754 3,632	32,629

TABLE LXI—(concl'd.)

Name of constituency	Total number of electors	Number and percentage of electors who voted		Total number of contesting candidates	Party affiliation	Number of valid votes polled by each candidate	Total number of valid votes polled in the constituency
		Number	Percentage				
1	2	3	4	5	6	7	8
Samalkha	58,797	30,681	52.18	6	Congress Jan Sangh Independent Bhartiya Karanti Dal Independent Independent	17,486 9,046 1,395 782 574 480	29,763
Panipat	58,343	37,566	64.39	5	Jan Sangh Congress Bhartiya Karanti Dal Independent Independent	16,957 13,386 5,729 567 247	36,886
Naultha	50,124	30,555	60.96	4	Congress Vishal Haryana Independent Independent	16,130 13,264 275 220	29,889
Rajaund (S.C.)	61,998	22,825	36.82	4	Congress Vishal Haryana Swatantra Republican	11,588 6,534 2,461 1,677	22,260
Pundri	54,330	31,970	58.84	5	Independent Congress Bhartiya Karanti Dal Swatantra Independent	14,211 13,773 2,691 370 233	31,278
Sherhada	55,827	37,795	67.70	8	Congress Swatantra Vishal Haryana Independent Independent Independent Independent Independent	21,074 11,929 1,576 1,172 413 339 225 150	36,878
Kaithal	59,598	43,140	72.38	4	Congress Jan Sangh Republican Independent	21,273 18,950 1,189 791	42,203
Pehowa	59,767	31,311	52.39	5	Congress Jan Sangh Swatantra Communist Independent	11,798 7,627 7,181 3,406 486	30,498

TABLE LXII

Constituencies and the number of valid votes polled for election to Lok Sabha
in the Karnal district during the Mid-Term Elections, 1971

Name of constituency	Extent in terms of Assembly constituencies	Total number of seats	Total number of electors	Total number of valid votes polled	Percentage of column 5 to column 4
1	2	3	4	5	6
Karnal	(12) Babain (13) Nilokheri (14) Indri (15) Karnal (16) Jundla (17) Gharaunda (18) Samalkha (19) Panipat (20) Naultha	1	5,04,486	3,16,780	62.79
Kaithal	(10) Shahbad (11) Thanesar (21) Rajaund (22) Pundri (23) Sherhada (24) Kaithal (25) Pehowa (26) Kalayat* (27) Narwana*	1	5,19,033	3,42,698	66.02

*These Assembly Constituencies fall in Jind district but have been included in the Kaithal Parliamentary Constituency.

TABLE LXIII
Local Dailies and Periodicals

Serial number	Name	Year of establishment	Place of publication	Circulation	Classification
1	2	3	4	5	6
DAILIES					
Hindi					
1.	Haryana Sainani (Evening)	1968	Karnal	..	News and current affairs
WEEKLIES					
Hindi					
2.	Grib Janata	1967	Kurukshetra	..	Ditto
3.	Haryana Darpan	1964	Karnal	1,546	Ditto
4.	Haryana Leader	1966	Kaithal	150	Ditto
Urdu					
5.	Amrit	1937	Karnal	2,000	Ditto
6.	Dastak	1967	Karnal	..	Ditto
7.	Deep Sandesh	1968	Karnal	500	Ditto
8.	Janam Bhumi	1956	Karnal	1,977	Ditto
9.	Talqeen	1963	Panipat	1,000	Ditto
Bilingual					
10.	Ek Jot (Hindi and Urdu)	1967	Karnal	..	Ditto
11.	Karnal Times (Hindi and Urdu)	1958	Karnal	4,816	Ditto
12.	Panipat Times (Hindi and Urdu)	1963	Panipat	..	Ditto
13.	Tumhid (Hindi and Urdu)	1961	Karnal	500	Ditto
FORTNIGHTLIES					
Hindi					
14.	Brahm Sandesh	1967	Karnal	..	Current affairs
15.	Mourakh	1967	Karnal	500	News and current affairs
Urdu					
16.	Karam Bhoomi	1965	Karnal	..	Ditto
17.	Nagar Pukar	1964	Karnal	700	Ditto

TABLE LXIII—(Contd.)

Serial number	Name	Year of establishment	Place of publication	Circulation	Classification
1	2	3	4	5	6
18.	Raftar	1965	Panipat	600	News and current affairs
19.	Voice of Employees	1966	Karnal	..	Labour
Bilingual					
20.	Aryakesari (Hindi and Urdu)	1967	Karnal	1,000	Literary and cultural
21.	Be-Phikar (Hindi and Urdu)	1968	Karnal	350	News and current affairs
MONTHLIES					
English					
22.	Voice of the Holy Land	1958	Jyotisar (Kurukshetra)	1,000	Religion and philosophy
Hindi					
23.	Bhav Lok	1966	Kurukshetra	..	Literary and cultural
24.	Filmi Dhamaka	1968	Karnal	466	Film affairs
25.	Gram Bhawna	1964	Patti Kalyana	1,418	Social welfare
26.	Law and Justice	1967	Karnal	..	News and current affairs
27.	Mazdoor Bhai	1968	Karnal	1,000	Labour
28.	Nirala Jogi	1963	Panipat	1,375	Medicine and health
29.	Punjab Sarvodaya Patrika	1960	Panipat	402	Social welfare
30.	Shri Tulsi Sandesh	1966	Kurukshetra	..	Religion and philosophy
31.	Tarun Deep	1968	Thanesar	440	Current affairs
Urdu					
32.	Daulat-ki-Barish	1941	Panipat	1,150	Commerce and industry
33.	Khushdil	1964	Karnal	1,000	Current affairs
34.	Nirala Jogi	1960	Panipat	1,375	Medicine and health
Bilingual					
35.	Dahshat (Hindi and Urdu)	1967	Karnal	1,000	Current affairs

TABLE LXIII—(Contd.)

Serial number	Name	Year of establishment	Place of publication	Circulation	Classification
1	2	3	4	5	6
36.	Hakumat Se Insaf (Hindi and Urdu)	1968	Karnal	1,000	Current affairs
37.	Zamir Farosh (Hindi and Urdu)	1967	Karnal	1,250	Ditto
BI-MONTHLIES					
Punjabi					
38.	Naqsh	1967	Karnal	..	Literary and cultural
QUARTERLIES					
English					
39.	Indian Journal of Science and Industry	1967	Karnal	275	Science
Bilingual					
40.	Aggarasar (English and Hindi)	1954	Panipat	990	School magazine
Multilingual					
41.	Govt. Higher Secondary School Magazine, Karnal (English, Hindi and Panjabi)	1965	Karnal	..	Ditto
42.	Harmony (English, Hindi, Panjabi and Urdu)	1949	Karnal	..	College magazine
43.	Moon (English, Hindi and Panjabi)	1965	Kaithal	..	School magazine
FOUR-MONTHLIES					
Multilingual					
44.	Yamuna (English, Hindi and Panjabi)	1955	Panipat	1,350	College magazine
HALF-YEARLIES					
Bilingual					
45.	Kurukshetra University Research Journal-Arts and Humanities (Hindi and English)	1966	Kurukshetra University	135	Literary and cultural
46.	Praci Jyoti-Digest of Indological Studies (English and Sanskrit)	1964	Kurukshetra University	..	Cultural-research journal
47.	Bal Vijay (English and Hindi)	1968	Gharaunda	..	School magazine

TABLE LXIII—(Concl'd.)

Serial number	Name	Year of establishment	Place of publication	Circulation	Classification
1	2	3	4	5	6
48.	Grey Kunj (English and Hindi)	1962	Kunjpora	650	School magazine
Multilingual					
49.	College Echoes (English, Hindi, Panjabi and Sanskrit)	1964	Karnal	750	College magazine
50.	Gyananjali, (English, Hindi, Panjabi and Sanskrit)	1962/ 1966	Kaithal	..	School magazine
ANNUALS					
Bilingual					
51.	Dairy Science College Magazine (English and Hindi)	1967	Karnal	1,000	College magazine
Multilingual					
52.	Bhrathri (English, Hindi, Panjabi and Sanskrit)	1968	Panipat	500	Ditto
53.	Karma Kshetra (English, Hindi, Panjabi and Sanskrit)	1965	Kurukshetra	..	School magazine

(Source : Press in India, 1969, Part 11)

TABLE LXIV

Dailies and Periodicals published outside the Karnal District

Name	Language	Periodicity	Place of publication
Tribune	English	Daily	Chandigarh
Hindustan Times	Ditto	Ditto	New Delhi
Statesman	Ditto	Ditto	Ditto
Times of India	Ditto	Ditto	Ditto
Indian Express	Ditto	Ditto	Ditto
Patriot	Ditto	Ditto	Ditto
Hindustan	Hindi	Ditto	Ditto
Nav Bharat Times	Ditto	Ditto	Ditto
Vir Arjan	Ditto	Ditto	Ditto
Hindi Milap	Ditto	Ditto	Jullundur
Vir Partap	Ditto	Ditto	Ditto
Punjab Kesari	Ditto	Ditto	Ditto
Pradeep	Urdu	Ditto	Ditto
Savera	Ditto	Ditto	Delhi
Milap	Ditto	Ditto	New Delhi, Jullundur
Partap	Ditto	Ditto	Ditto
Tej	Ditto	Ditto	New Delhi
Illustrated Weekly	English	Weekly	Bombay
Dharma Yug	Hindi	Ditto	Ditto
Blitz	Hindi, Urdu and English	Ditto	Ditto
Hindustan	Hindi	Ditto	Ditto
Panchajanya	Ditto	Ditto	Lucknow
Link	English	Ditto	New Delhi
Organiser	Ditto	Ditto	Delhi
Yojna	Hindi & English	Ditto	Ditto

TABLE LXIV—(Concl'd.)

Name	Language	Periodicity	Place of publication
Filmfare	English	Fortnightly	Bombay
Sarita	Hindi	Monthly	New Delhi
Sushma	Ditto	Ditto	Ditto
Shama	Urdu	Ditto	Ditto
Biswin Saddi	Ditto	Ditto	Delhi
Shabistan (Urdu digest)	Ditto	Ditto	Ditto
Huma (Urdu digest)	Ditto	Ditto	Ditto
Bano	Ditto	Ditto	Ditto
Reader's Digest	English	Ditto	Bombay



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सत्यमेव जयते

GLOSSARY

- Abadi*—Inhabited spot or place
- Ala Malikiyat*—Superior ownership in the case of land in which the proprietary rights are divided
- Amavas*—Moonless night
- Amir*—A chief
- Anand Karaj*—Marriage ceremony according to Sikh rites
- Balwaqi*—A community centre for children
- Ban*—Thick twine made of *munj*
- Bandarwala*—Monkey-Juggler
- Bangar*—Old alluvial, the old high bank of the Yamuna
- Baraat*—A marriage party
- Barani*—Dependent on rain
- Basti*—An inhabited place
- Bazaar*—Shopping centre
- Begar*—Forced labour
- Bhajan*—A devotional song
- Bhang*—The dried leaves and small stalks of hemp (*Camalis indica*), used to cause intoxication, either by smoking, or when eaten mixed up into a sweetmeat
- Bhanja*—Nephew (sister's son)
- Biradari*—Brotherhood
- Burfi*—Sweetmeat prepared from milk
- Burkah*—A veil, a mantle
- Chabuk*—A whip
- Chhaj*—A winnowing basket
- Chakravayuha*—An array of soldiers in the form of a square or circle
- Chandna*—A sheet of cloth or mantle worn by a woman for covering the head and upper half of the body
- Chapati*—Flat unleavened bread
- Chappal*—A kind of footwear
- Charpoy*—The common Indian bedstead
- Charsa*—A device used for drawing water for irrigation
- Chopal*—A village guest house
- Chowkidari*—Engaging a watchman, Institution of Chowkidar
- Dak*—The mail
- Dal*—The generic name of pulses prepared for use by being broken in a hand mill
- Darshan*—The visiting of a sacred shrine
- Dhaba*—Eating house
- Dhaincha*—A kind of green manuring
- Dhak*—*Butea frondosa*
- Dupatta*—A kind of scarf worn by women to cover breast and head
- Durbar*—A court
- Durrie*—A carpet
- Fakir*—‘One poor in the sight of God’, applied to a Mohammedan religious mendicant
- Gaushala*—Cow pen
- Ghagri*—A skirt from wrist to knee
- Ghani*—Oil crusher

Ghurchari—The ceremony in which the bridegroom, at the time of marriage, goes to the bride's house (to be married) on a mare

Gidda—A women folk-dance

Granth Sahib—The religious book of the Sikhs

Grih Pravesh—A religious ceremony of a new house before its occupation

Grihasta—Married life

Gur—Unrefined sugar in lumps

Gurdwara—A sikh temple

Gwara—A pulse (*Cyamopsis psoralioides*)

Hali—An agricultural labourer

Halwa—A kind of sweetmeat, porridge

Halwai—Sweetmeat seller, a confectioner

Hundi—Bill of exchange

Idgah—A place of assembly and prayer on occasion of Muslim festival

Jagirdar—A holder of jagir (place holding)

Jaimala—The garland which the bride puts around the neck of the bridegroom

Jalebi—A kind of sweetmeat

Jheel—A lake

Jooti—A kind of footwear

Kachcha—Clay built, of imperfect construction

Kanal—A measure of land, 500 square yards

Khadar—The recent alluvial bordering a large river

Kharif—Autumn harvest

Kharoshthi—An ancient script of India which was written from right to left

Khes—A thick cotton sheet, also used as a blanket

Khir—A dish made of rice, milk and sugar boiled together

Kho Kho—An indigenous game

Kirtan—Singing in loud tone in praise of God, recitation accompanied by music

Kos—A distance of two miles

Kosminar—A kos pillar

Kumba—Household, family

Laddu—A common sweetmeat, consisting of balls of sugar and ghee mixed with gram flour

Lambardar—A representative of cultivators who is registered by the Government in order to collect land revenue

Lathi—A stick

Loi—A kind of thin (woollen) blanket or wrapper

Luh—The hot wind of summer

Lungi or Tehmat—A cloth simply wrapped once or twice round the hips and tucked in at the upper edge

Malta—Sweet lime

Marla—A measure of land, twenty-five square yards

Moorha—A stool (made of reeds or cane and cord)

- Muafi*—The land which is exempted from rent, a freehold land
- Mundan*—The shaving of hair on a child's head for the first time
- Naka Bandi*—Posting guards to stop the entry in a place
- Nata*—Betrothal
- Naxatra*—The first nine days of the bright half of Asvin or Chaitra
- Nazrana*—An offering, a gift, a present
- Neota*—Invitation, treat
- Nilgai*—A kind of big white-footed antelope
- Niwar*—About 3 inches wide cotton tape used for stringing bedstead
- Palang*—Bedstead
- Pana or Patti*—Section of a village
- Panch*—Member of a *panchayat*
- Panchayat*—Village assembly
- Pargana*—Group of villages
- Phera*—A part of the marriage ceremony among Hindus in which the bride and the bridegroom go round the sacred fire
- Phulkari*—Flowered figured cloth
- Pinda*—A lump of food
- Pir*—A saint
- Prakarma*—A going round an idol as a mark of reverence, the path round a temple which is used for circumambulation
- Prastha*—An ancient administrative unit
- Puja*—Veneration
- Punar-vivah*—Re-marriage
- Purdah*—Especially a curtain screening women from the sight of men
- Purohit*—A family priest
- Qazi*—A Mohammedan judge or law officer
- Rabi*—Spring harvest
- Ragi*—Village singer
- Ragini*—Village folk-song
- Rasgulla*—A kind of Bengali sweetmeat
- Rath or Majholis*—A chariot, a carriage
- Rehri*—Hand-cart
- Retli Dhurti*—Sandy soil
- Richhawala*—Bear-Juggler
- Rishi*—A sage
- Rokna or Tikka*—A ceremony preceding marriage among Hindus whereby the boy is reserved as a bridegroom for the prospective bride
- Sadhu*—Hindu medicant or ascetic
- Sagai*—Betrothal, an engagement
- Salwar*—A kind of trousers worn by women
- Samskara*—Rite
- Sanyasi*—One who has abandoned all worldly attachment
- Sara*—A pond
- Sardar*—Leader or an officer
- Sarson*—Indian colza, an oil-seed (*Brassica campestris*)
- Satsang*—Intercourse with good persons, society of pious persons
- Sehra*—Bridal chaplet
- Shradh, Sharaddha*—Ceremony of the propitiation of the dead
- Shamiana*—Tent
- Shamlat*—Common land
- Shawl*—A square or oblong fabric, garment or wrapper used

especially as a covering for the head and shoulders
Shisham—The Indian rose wood tree
 (*Dalbergia sisu*)
Shivala—Shiva temple
Sharamdan—Voluntary contribution of labour
Sirki—A kind of reed, a mat which is made of this reed to keep off rain
Sufedposhi—Institution of *sufedposh*, a village official

Sufi—A Mohammedan sect
Surahi—A long-necked flask, a gugglet
Talab—A tank
Talukdari—Superior proprietorship
Tapa—Group of villages
Tirath—A place of pilgrimage
Tirthankara—The name of supreme God of Jains
Wazir—A minister
Zail—A sub-division of a tahsil
Zamindar—A land holder



INDEX

A

- Abdul Ahad Khan : 31, 32
 Abdul Rahim : 26
 Abhimanyu : 493
 Abhimanyu Khera : 493
 Abu Bakr : 22
 Abu-l-Fazl : 26
 Adam Taylor : 413
 Adil Shah : 25
 Adi Shankracharya : 510
 Administration of Evacuee Property Act, 1950 : 106
 Aeroplane Fund : 47
 Afghan (s) : 25, 26, 39, 42, 67, 102
 Afghanistan : 29, 483
 Agaundh : 70
 Agra : 26
 Agricultural Produce (Development and Warehousing Corporation) Act, 1962 : 203
 Agriculturists' Loans Act XII of 1884 : 191
 Ahar : 418
 Aharia : 445
 Ahmad Ali Khan : 45
 Ahmed Shah Abdali : 37, 499, 514
 Ahmad Shah Durrani : 28, 29
 Ahmedabad : 182
 Ain-i-Akbari : 2
 Ajit Singh : 42
 Ajrana Kalan : 463
 Ajrana Khurd : 463
 Akalgarh : 495
 Akbar : 2, 24, 25, 26, 69, 121, 498, 500, 514, 515, 522
 Akkad : 505
 Alahar : 24
 Ala-ud-din Alim Khan : 24
 Ala-ud-din Khalji : 515
 Ali Bahadur : 33
 Ali Mardan Khan : 121
 Allahabad : 42, 486
 All India Scheduled Castes Federation : 458, 459, 469, 470
 All India Sewa Samiti : 480
 Ambaji Ingle : 33
 Ambala : 1, 2, 3, 4, 7, 9, 24, 27, 29, 38, 44, 46, 49, 69, 122, 123, 142, 155, 159, 196, 207, 218, 224, 261, 271, 364, 384, 422, 438, 443, 460, 499, 502, 503, 518, 521
 Ambala Cantt : 261, 278, 347, 408, 483
 Ambala Central Co-operative Bank Ltd., Ambala City : 192
 Ambala City : 485
 Ambala-Panipat-Delhi Railway : 170b
 Ambala-Saharanpur-Railway Line : 167
 Amin : 18, 62, 64, 218, 364, 493
 Amir-ul-Umra Nasib-ud-daulah : 29, 30
 Amritsar : 30, 89, 250
 Amunpur Khalsa : 71
 Anangapal : 20
 Andarwar : 283, 285, 286
 Anjani (Anjana) : 498
 Apaya : 17
 Archer : 13
 Arjanheri : 364
 Arjuna : 506, 510, 511, 526
 Arnetu : 8
 Arnoli : 41, 476
 Arora (s) : 76, 102, 111
 Aryan (s) : 17, 76, 381, 505, 521, 524
 Arya Pratinidhi Sabha : 391, 407
 Arya Sabha : 466
 Arya Samaj : 47, 66, 383, 489
 Asandh : 7, 9, 23, 45, 46, 47, 70, 157, 208, 224, 226, 265, 270, 341, 356, 358, 364, 446, 457, 461, 463, 464, 494, 495
 Asan Kalan : 66, 71, 463, 464
 Asan Khurd : 71
 Ashoka : 522, 523
 Assyria : 505
 Auckland, Lord : 42
 Aurangzeb : 497, 498, 501, 509, 511, 521, 523, 524
 Azimabad : 42
 Azim-ullah Khan : 39

B

- Ba-Bapu Shiksha Samiti, Kaithal : 492
 Baghel Singh : 32
 Babar : 24, 25, 27, 514, 515, 519
 Babain : 29, 32, 41, 42, 292, 460, 463, 464, 465, 467,
 Babarpur : 218
 Babylon : 505
 Backward Classes : 108, 356, 388, 437, 445, 448
 Badarpur : 71, 123
 Badauli : 42
 Baden Powel : 172
 Badrinath : 510
 Bahadur Shah : 27
 Baharjachh : 9
 Bahal Singh : 40
 Bahlul Lodhi : 24
 Bahlolpur : 431, 526
 Bahola : 526
 Baholi : 65
 Bairam Khan : 25
 Baj Singh : 44
 Baje Ram : 99
 Bajigar : 445, 446
 Bakali : 463
 Bal Jatan : 31, 463, 464
 Bal Shiksha Samiti, Kaithal : 492
 Bala : 29, 31, 45, 46
 Baldni : 444
 Baluch (es) : 39, 40, 67, 102
 Balmiki : 65, 445, 446
 Ban : 463
 Bana : 19, 507, 522
 Banaras Hindu University : 407
 Banda Bairagi : 27, 500, 519
 Bandrana : 464
 Bangar : 123, 282, 284, 285, 286, 413
 Bangalore : 160, 398, 399
 Bangna Nadi : 167
 Bansi Lal : 51, 365, 426,
 Bapa : 70
 Bapauli : 418
 Bapuji Malhar : 34, 35
 Baraut : 70, 476
 Barauta : 70
 Baragaon : 444
 Bardul : 206
 Barna : 220, 444, 464
 Barsat : 206, 220
 Basara : 431
 Basantpur : 132
 Bastali : 100, 526
 Batwal : 445
 Bauria : 445
 Bawa Farid Shakarganj : 66
 Bazida Jatan : 218
 Bazida distributary : 124, 349
 Bazidpur : 29
 Begam Samru : 33, 34, 36
 Beggi : 206, 220
 Bengal : 3, 19, 31, 205
 Bhag Singh : 3, 29, 32, 33, 35, 36, 40, 43, 44, 501
 Bhagpat : 28
 Bhagwanji : 48
 Bhagwat Dayal Sharma : 51
 Bhai Budha Singh : 40
 Bhai Mit Singh : 29
 Bhai Sangat Singh : 41
 Bhakra : 124, 125
 Bhakra Canal System : 490
 Bhakra Dam : 124
 Bhakra Main Line : 119, 122, 126, 127, 349
 Bhakra Nangal Project : 175, 176
 Bakshi Shyam Rao : 33
 Bhalsi : 45, 461
 Bhana : 476
 Bhang Singh : 3, 29, 32, 34, 35, 36, 40, 43, 44
 Bhangi : 445
 Bhara Mall : 501, 502
 Bharat Scouts and Guides Association, Karnal : 482
 Bharatas : 17
 Bhartauli : 71
 Bhartiya Jan Sangh : 456, 457, 459, 461, 462, 464, 465, 466, 467, 470, 471
 Bhartiya Kranti Dal : 465, 466, 469
 Bhartri Hari : 98
 Bhatia : 67
 Bhedkut : 445
 Bhilai : 180
 Bhishma : 73, 510
 Bhiwani : 170c, 196, 261, 438

Bhojadeva : 19, 20, 517
 Bhor : 70, 354, 526
 Bhudwal Majri : 484
 Bhuna : 445
 Bhuslan : 220
 Bhutana : 269, 444, 456, 458, 460, 461
 Bibi Sahib Kaur : 35, 40
 Bibipur Lake : 9, 132, 168
 Bibipur Bund : 132
 Bidkiyar : 498
 Bidkiyar lake : 41, 496, 498
 Bijayapal : 20
 Bijharpur : 132
 Bilaspur : 169
 Binjhaul : 124
 Bir Dhandari : 445
 Bir Baraswan : 13
 Bir Badalawa : 445
 Bir Kohli Khera : 13
 Birender Singh : 51
 Birthebari : 449
 Bishan Singh : 43
 Bombay : 182, 398
 Brahma : 504, 505, 511, 517
 Brahman (s) : 35, 62, 64, 69, 74, 75, 82, 85,
 87, 93, 102, 381, 382, 383, 489, 522
 British (Government period) : 3, 36, 37, 39,
 41, 44, 45, 46, 47, 69, 247, 281, 289,
 301, 374, 497, 501, 512, 519, 523
 British Indian Army : 50
 Buali Shah Qalandar : 45, 66, 501, 515
 Budha : 507, 511, 523
 Budha Khera : 66, 124, 501
 Budhera : 124, 127
 Budhlada : 40, 196
 Buhawi : 71
 Burhan-ul-Mulk : 27
 Burhi Nadi : 7, 8, 23
 Burma : 69
 Buriya : 34, 38, 123

C

Calcutta : 36, 69, 163, 501
 Canning : 362
 Central Asia : 497
 Central Bank of India : 193
 Central Co-operative Bank Ltd., Karnal :

192

Central Sales Tax Act, 1956 : 315
 Central Semen Bank : 156, 157
 Central Soil Salinity Research Institute,
 Karnal : 117
 Ceylon : 69, 482
 Chabutra Fateh Mubarak : 25
 Chakravarty Lake, Uchana : 223
 Chakchandpur : 431
 Chamar (s) : 67, 445, 446
 Chamar Sabha : 50
 Chamain : 75
 Chand Kaur : 43
 Chandigarh : 192, 217, 241, 358, 363, 364,
 441, 443, 483, 499
 Chandigarh Transport Undertaking,
 Chandigarh : 216
 Charao : 177
 Chatta (s) : 67
 Chautang : 5, 7, 9, 22, 121, 123, 125, 161,
 166, 167, 286
 Chautang Canal System : 123, 349
 Chautang feeder : 123
 Chhachhrauli : 9, 38, 398
 Chhapra : 460
 Chhalaundi : 463
 Chicharwala : 8
 Chika : 208, 209, 270, 354, 495
 Child Marriage Restraint Act, 1930 : 84
 Chinese Aggression : 261, 408
 Chokar : 75
 Choya : 7
 Christians : 60, 69, 87
 Chura : 445
 Churni : 29
 Chunian : 104
 Cis-Satluj : 31, 32, 34, 35, 38, 40, 43, 497
 Civil Disobedience Movement : 49, 50
 Comforts Fund : 47
 Communist Party of India : 459, 461, 465,
 467
 Communist Party of India (M) : 465, 466,
 467
 Congress : 49, 50, 467, 470, 471
 Congress (O) : 467, 471

Congress (Presided over by Shri Jagjiwan Ram) : 466, 470

Congress (Presided over by Shri Nijalingappa) : 466

Constitution of India : 247, 446

Co-operative Cold Storage, Panipat : 203

Co-operative Thrift and Credit Society : 191

Co-operative Societies Act, 1904 : 191

Court Fees Act, 1870 : 305

Court Fees (Haryana Amendment) Act, 1974 : 305

Cunningham : 521, 523, 525

D

Dabkauli : 206, 220

Dabkauli Chaura Bund : 168

Dachar : 45

Dadrewa : 71

Dadupur : 122, 123, 170 a

Dadupur Khalsa : 70

Daha : 29

Daler Khan : 30, 42

Dalla Majra : 132

Damayanti : 82

Damli : 8, 29

Damli Bund : 167

Dana Singh : 30

Dangerous Drugs Act, 1930 : 307

Danipur : 460

Dara Shikoh : 524

Darar : 444

Darain : 445

Dasarjana : 7

Dattaji Sindhia : 28

Daulatpur : 19, 526

Daulat Rao Sindhia : 36

Deep Chand : 99

Defence of India Act : 48

Defence of India Rules : 332, 333

Dehati Janta Co-operative Transport Societies Ltd., Karnal : 212

Dehrah : 73

Delhi : 2, 3, 8, 20, 21, 22, 23, 24, 25, 26, 28, 30, 31, 32, 33, 36, 37, 39, 40, 44, 46, 48, 49, 54, 121, 156, 158, 163, 171, 177, 180, 196, 205, 207, 217, 218, 223, 237,

241, 283, 341, 382, 443, 499, 502, 503, 514, 519

Delhi-Ambala Railway : 196, 205, 207, 494, 503, 519

Delhi Branch : 123, 124

Delhi Cold Storage, Karnal : 203

Delhi Milk Supply Scheme : 156

Delhi Water-Supply : 127

Deoban : 90, 433

Depressed Classes League : 456, 469

Desu Singh : 32, 40, 43, 497, 498

Deswal : 74

Devaraja : 20

Devi Dutta : 34

Devji Gavle : 34

Dewan Cold Storage, Karnal : 203

Dewan Nanu Mall : 33, 34

Dharam Garh : 31

Dharam Pala : 19

Dhanak : 445

Dhand : 208, 354

Dhandhauta : 220

Dhansauli : 8

Dhatrat, Dhatrut : 22, 36

Dhinwar : 445

Dhirpur : 218

Dhobi : 445

Dhons : 350

Dhus : 446

Dilwar Ali Khan : 26

Displaced Persons (Claims) Act, 1950 : 110

Displaced Persons (Compensation & Rehabilitation) Act, 1954 : 110, 513

Displaced Persons (Debt Adjustment) Act, 1951 : 341

District Olympic Association, Karnal : 482

District Tuberculosis Association, Karnal : 486

District Wholesale Co-operative Supply & Marketing Society : 201

Diwan Singh : 32, 33

Diwana : 218

Doom : 445

Dost Mohammed Khan : 501

D.P. Dhar : 170 c

Drishdwati : 17, 504



Droncharya : 493
 Dumna : 445
 Duniya Majra : 463
 Durgapur : 180
 Duryodhana : 18, 514, 526
 Dyal Singh : 30

E

East India Company : 37, 205, 497
 East Germany : 482
 East Punjab : 102, 104, 106, 391
 East Punjab Agricultural Pests Diseases and
 Noxious Weeds Act, 1949 : 149-150
 East Punjab General Sales Tax Act, 1948 :
 309
 East Punjab Holdings (Consolidation and
 Prevention of Fragmentation) Act, 1948 :
 305
 East Punjab Improved Seeds and Seedling
 Act, 1949 : 144
 East India Molasses (Control) Act, 1948 :
 307
 East Punjab Refugees Rehabilitation (Build-
 ings and Building Sites) Act, 1948 : 107
 East Punjab Urban Land Restriction Act,
 1949 : 234
 East Punjab Urban Rent Restriction Act,
 1949 : 341, 342
 East Punjab Utilization of Lands Act, 1949 :
 283, 302, 303
 Economic and Statistical Organisation,
 Haryana : 248
 Egypt : 505
 Employees' Provident Funds Act, 1952 : 441
 Employees' State Insurance Act, 1948 : 442
 Epidemic Diseases Act, 1897 : 420
 Essential Commodities Act, 1955 : 332
 Estate Duty Act, 1953 : 317
 Europe : 37

F

Factories Act, 1948 : 438
 Faridabad : 337
 Faridkot : 38
 Fateh Pur : 444, 445
 Fateh Singh : 43
 Feroze Gandhi Memorial Institute, Kaithal :
 492

Firishtha : 20
 First Five-Year Plan (1951-56) : 206
 First General Elections (1952) : 455, 458,
 469
 First Sikh War : 512
 Firozpur : 24, 196, 514
 Firozpur-Delhi Railway : 196
 Firuz Shah (Tughluq) : 22, 121, 524
 Forward Block : 466
 Fourth Five-Year Plan : 133, 247, 248
 Fourth General Elections (1967) : 470, 471
 Francois Bernier : 9

G

Gadhi Jatan : 71
 Gagsina : 49, 50
 Gahlaur : 74
 Gajpat Singh : 29, 31, 32, 33, 500, 501, 502
 Gandar : 45
 Gandhi-Irwin Pact : 49
 Gandhi Smarak Nidhi, Patti Kalyana :
 483, 484
 Ganga : 73, 87, 381, 510, 526
 Ganganagar : 71
 Ganjo Gadhi : 444
 Ganpati : 62
 Garhi Jat : 7
 Garhi Nazir : 73
 Gatwal : 74
 Gaur (s) : 75
 Germany : 47
 George Thomas : 35, 36, 40, 501
 Ghagghar : 5, 7, 9, 19, 23, 119, 132, 161,
 166, 168, 209, 219, 220, 495, 497
 Gharaunda : 3, 24, 27, 31, 34, 45, 56, 58,
 145, 157, 183, 199, 203, 205, 207, 218,
 225, 226, 265, 269, 292, 354, 367, 372,
 406, 407, 410, 423, 457, 458, 461, 463,
 464, 465, 467, 494, 501
 Gharaunda Co-operative Marketing-cum-
 Processing Society Ltd. : 201
 Ghamghas : 74
 Ghazni : 21, 63
 Ghiyar : 444, 476
 Ghiyas-ud-din Tughlaq : 501
 Gholpur : 124
 Ghumthala Rao : 206, 220

Ghuram : 32
 Gian Bus Service Regd., Narwana : 216
 Gift-Tax Act, 1958 : 319
 Gill (s) : 67
 Gita : 62, 63
 Gitalpur : 124
 Gocla Khurd : 206, 220
 Gogripur : 124
 Gohana : 206, 209
 Gohana Distributary : 123
 Gohna : 464
 Goli : 157
 Goli Distributary : 124
 Gondhni : 9
 Gopi Chand : 98
 Gram Panchayat Act, 1952 : 375
 Grand Trunk Road : 196, 205, 207, 208,
 217, 218, 221, 223, 224, 235, 334, 338,
 391, 398, 402, 418, 443, 487, 493, 494,
 499, 502, 503, 512, 515, 518, 519
 Guardian and Wards Act, 1890 : 341
 Guhna : 100
 Gubram : 22
 Gujar (s) : 45, 67, 74, 75, 85, 102, 230
 Gujarat : 26, 182
 Gujranwala : 75, 102, 104, 110, 180
 Gula (Guhla) : 2, 3, 4, 11, 14, 23, 44, 57,
 65, 67, 68, 70, 71, 73, 117, 119, 132,
 135, 157, 165, 168, 209, 225, 265, 269,
 270, 271, 280, 283, 285, 292, 293, 433,
 460, 464, 495, 518, 520
 Gulab Singh : 41
 Gulam Kadir : 33
 Gulzari Lal Nanda : 490
 Gulsher Khan : 34, 36, 42
 Gumthala : 35
 Gumthala Kheri : 526
 Gurbakhash Singh : 41
 Gurdaspur : 398
 Gurdit Singh : 29, 32, 34, 36, 41, 42, 501
 Gurgaon : 3, 207, 261, 337
 Gurgaon Canal System : 127
 Guru Angad Dev : 507
 Guru Gobind Singh : 27, 507, 509, 511
 Guru Hargobind : 507
 Gurukul Kangri University : 407
 Guru Nanak : 507, 511

Guru Teg Bahadur : 73, 502, 507

H

Habri : 69, 444
 Habri Sub-Branch : 124
 Hakra Bed : 7
 Hali, Khwaja Altaf Hussain : 515, 516
 Halwat : 74
 Hamidpur : 431
 Hansi : 21, 35, 36, 121, 133
 Hansi Branch : 123, 124
 Hanumana : 61, 63, 496, 498
 Hardeva : 99
 Harding, Lord : 43
 Hardwar : 420, 486
 Harsha-vardhana : 19, 381, 522, 523
 Harsha-charita : 19, 508, 522
 Harijan (s) : 66, 110, 159, 181, 447, 451, 489
 Haryana (Hariyana) : 1, 7, 18, 19, 20, 29,
 30, 35, 47, 51, 61, 76, 87, 95, 96, 99, 102,
 110, 117, 128, 133, 158, 160, 163, 170 a
 207, 221, 244, 248, 251, 253, 265, 357,
 361, 363, 365, 385, 387, 389, 394, 401,
 426, 438, 441, 442, 444, 462, 468, 473,
 474, 475, 482, 484, 490, 495, 502, 504,
 508
 Haryana Co-operative Transport Ltd.,
 Kaithal : 213
 Haryana General Sales Tax Act, 1973 : 309
 Haryana Milk Foods, Pchowa : 170 (c)
 Haryana Land-Holdings Tax Act, 1973 : 300
 Haryana Roadways, Ambala : 215
 Haryana Roadways, Chandigarh : 216
 Haryana Roadways, Gurgaon : 216
 Haryana Roadways, Hisar (Hissar) : 216
 Haryana Roadways, Karnal : 213
 Haryana Roadways, Rohtak : 215
 Haryana Social Welfare Society, Kaithal : 492
 Haryana Vidhan Sabha : 455, 462, 465, 467,
 468
 Hathwala (Hatwala) : 169
 Himachal Pradesh : 441, 484
 Himalayas : 8
 Himu (Hem Chandra) : 25, 514
 Hindi : 59, 60, 66, 361, 362, 387, 405, 472,
 486, 488, 489

- Hindu (s) : 21, 25, 48, 49, 60, 61, 62, 66, 70
 71, 72, 73, 74, 77, 80, 87, 102, 154, 223,
 381, 382, 488, 491, 495, 496, 498, 501,
 505, 506, 508, 511, 517, 520, 521, 524
 Hindu Maha Sabha : 455
 Hindu Marriage Act (1955) : 82, 84, 85,
 342
 Hindu Shiksha Samiti : 492
 Hindu Succession Act (1956) : 80
 Hindustan : 25, 381
 Hindustan General Insurance Company Ltd. ;
 193
 Hisar (Hissar) : 2, 3, 22, 47, 121, 123, 152,
 159, 207, 221, 261, 338, 350
 Hira Mal Jamal : 98
 Hsuen Tsang (Yuan Chwang) : 19, 62, 507,
 521, 522, 523, 525
 Holland : 482
 Hughes, Captain : 45, 46
 Hulana : 124
 Humayun : 25, 515
 Husanpur : 32
- I**
- Ibbetson, Denzil Charles Jalf : 291
 Ibrahim Husain Mirza : 26, 500
 Ibrahim Lodhi, Sultan : 24, 25, 514, 515,
 519
 Ikhtiar Khan : 39
 Itutmish : 22
 Imperial Indian Relief Fund : 47
 Inayat Khan : 39, 40
 Income Tax Act, 1961 (62) : 317
 Independence : 106, 225, 382, 471
 India : 2, 13, 17, 19, 20, 21, 23, 26, 27, 33,
 36, 47, 54, 69, 104, 110, 154, 161, 170 c
 205, 334, 365, 455, 481, 483, 489, 490,
 512
 Indian Arms Act, 1878 : 332
 Indian Council of Agricultural Research :
 398
 Indian Evidence Act, 1872 : 376
 Indian Forest Act, 1927 : 163
 Indian Hockey Federation : 482
 Indian Income Tax Act, 1922 : 317
 Indian Motor Transport Company (Pvt.)
 Ltd., Karnal : 211
 Indian Motor Vehicles Act, 1914 : 333
- Indian National Army : 50
 Indian National Congress : 455, 456, 457,
 458, 459, 461, 462, 464, 465, 471
 Indian Opium Act, 1878 : 307, 332
 Indian Power Alcohol Act, 1948 : 307
 Indian Railways Act, 1890 : 332
 Indian Stamp Act, 1899 : 305
 Indian Succession Act, 1925 : 342
 Indri : 3, 6, 24, 29, 32, 42, 43, 60, 123, 127,
 128, 198, 225, 226, 269, 281, 282, 284,
 291, 292, 301, 354, 364, 444, 460, 463,
 464, 465, 467, 495
 Indri Drain : 169, 350
 Indira Gandhi : 365
 Indo Bactrian Greeks : 18
 Indo-Pak Conflict : 261
 Indore : 362
 Indus : 17, 19
 Intensive Agricultural District Programme
 (I.A.D.P.) : 244, 245, 246, 247, 252.
 Iskandar Khan : 26
 Ismailabad : 29, 354
 Israna : 124, 201, 356, 358, 446
 Israna Distributary : 349
 Ithad Motor Transport (P) Ltd., Delhi :
 216
 Izzat Khan : 42
- J**
- Jacquemont : 514
 Jagadhri : 24, 123
 Jagjiwan Ram : 471
 Jaglan : 74
 Jahangir : 26
 Jai Bharat Insurance Company, Ltd. : 193
 Jai Singh Rai : 32
 Jain (s) : 60, 69
 Jajanpur : 444, 445
 Jajhar (Jhajjar) : 22, 196
 Jalkheri : 431
 Jalalpur : 463, 464
 Jallianwala Bagh : 48
 Jalwana : 45, 46, 47
 Jamalpur : 8
 Jamait Singh : 44
 Jambudvīpa : 507
 Jandheri : 460

Janko Rao : 31
 Janta Cold Storage, Panipat : 203
 Japan : 482
 Jarauli : 168
 Jarauli Retired Bund : 168
 Jaswant Rao Holkar : 40
 Jat (s) : 22, 25, 42, 46, 59, 74, 80, 85, 88, 93,
 94, 111, 230
 Jathlana : 71, 73
 Jatia : 445
 Jaursi Khurd : 526
 Jayadratha : 493
 Jetpur : 460
 Jhabala : 463
 Jhangra Brahman : 445
 Jhansa : 133, 198
 Jhinwar : 445
 Jind : 1, 12, 29, 31, 33, 36, 37, 38, 40, 41,
 44, 121, 123, 194, 206, 207, 208, 209,
 413, 438, 500, 504, 508
 J.K. Bhonsle, General : 407
 Jodh Singh Kalsia : 34
 Jogi Majra : 167
 Jogi Nath : 445
 Jogsi : 209
 Jugal Kishore Birla : 511
 Jui Canal : 170 c
 Julaha : 445
 Jullundur : 29, 46, 89, 178, 407
 Jundla : 141, 199, 292, 356, 446, 460, 463,
 464, 465, 467
 Jyotisar : 492, 504, 506, 507, 508, 510

K

Kabirpanthi : 445
 Kabri : 65
 Kachrauli : 141, 463, 464
 Kahar : 445
 Kailash : 463
 Kailash Chemicals and Textile Mills : 170 c
 Kaithal : 3, 4, 7, 12, 18, 22, 23, 32, 33, 35,
 36, 37, 39, 40, 41, 43, 44, 46, 48, 49, 57,
 58, 59, 60, 61, 63, 67, 68, 69, 70, 71, 72,
 73, 74, 75, 90, 100, 101, 103, 106,
 119, 124, 125, 126, 127, 128, 136, 137,
 145, 151, 153, 156, 157, 163, 167, 168,
 169, 171, 172, 173, 174, 175, 176, 179,

180, 182, 184, 192, 193, 194, 198, 203,
 207, 208, 209, 218, 225, 226, 233, 249,
 265, 269, 270, 271, 273, 278, 279, 281,
 283, 285, 290, 291, 292, 293, 315, 334,
 336, 337, 341, 343, 344, 347, 348, 349,
 354, 355, 357, 358, 359, 367, 370, 384,
 386, 393, 402, 410, 421, 422, 423,
 425, 429, 431, 432, 433, 445, 446, 449,
 457, 458, 459, 460, 461, 462, 463, 464,
 466, 467, 468, 474, 476, 485, 495, 496,
 497, 498, 500, 508, 516, 517, 518, 520,
 525

Kaithal-Ambala Road : 391
 Kaithal Co-operative Marketing Society
 Ltd. : 201
 Kaithal-Karnal Road : 393, 402
 Kaithal Naguran Co-operative Transport
 Society Ltd. : 272
 Kaithal-Thanesar Road : 125
 Kakor Khurd : 7
 Kala Am : 499
 Kala Amb, Ambala, Pehowa, Kaithal, Nar-
 wana, Fatehabad Road (S.H.2) : 207
 Kalawar : 460
 Kalayat : 492, 508
 Kalsan : 75
 Kalsaura : 206, 220
 Kalyani : 398
 Kamboj : 445
 Kambohpora : 463
 Kanaul : 19, 21, 381, 517, 522
 Kangwal : 460
 Kanpur : 181, 362
 Kanthla : 463
 Kanthala Bund : 132
 Kapisthala : 18, 496, 508
 Karam Kaur : 43
 Karam Singh Nirmala : 32, 34, 35, 43
 Karhans : 484
 Karna : 1, 500, 501
 Karnal Card Board Industries, Charao
 (Karnal) : 177
 Karnal Central Co-operative Bank Ltd.,
 Karnal : 150
 Karnal Cold Storage, Karnal : 203
 Karnal Co-operative Marketing-cum-Pro-
 cessing Society Ltd. : 201

- Karnal Co-operative Transport Society Ltd.,
 Karnal : 212
 Karnal Delhi Co-operative Transport Society
 Ltd., Karnal : 212
 Karnal Electric Supply Company Ltd., Karnal
 : 176
 Karnal General Labour Co-operative
 Transport Society Ltd., Karnal: 213
 Karnal Haryana Co-operative Marketing-
 cum-Processing Society Ltd., : 201
 Karnal-Kaithal Co-operative Transport
 Society Ltd., Karnal : 212
 Karnal Mill Channel : 124
 Karnal Tonga Drivers Co-operative Trans-
 port Society, Ltd., Karnal : 213
 Karor Singhia : 29
 Kasaur : 132
 Kashmir (J & K) : 20, 54
 Kathiawar : 13
 Katkhar : 74
 Kaul : 100, 167, 226, 392, 410, 444, 445
 Kaurvas : 1, 18, 493, 496, 500, 505, 506,
 514, 518
 Keorak : 168
 Khadar : 282, 284, 285
 Khadi Ashram, Panipat : 485
 Khadi and Village Industries Board (Commis-
 sion) : 173, 190
 Khadi Wool Weavers Co-operative Industrial
 Society, Panipat : 187
 Khairi : 70
 Khalimpur : 19
 Khan Firuz : 494
 Khanauri : 167, 168, 208
 Khanpur : 167
 Khatik (s) : 181, 445
 Khatri (s) : 74, 76, 102, 116
 Kheri : 124
 Kheri Khera : 526
 Kheri Shraf Ali : 90, 433
 Kheri Sheru : 90, 433
 Khilafat (movement) : 49
 Khizir Khan : 515
 Khojgipur : 206, 220
 Khusrav : 26
 Kidarnath : 510
 Kielhorn : 20
 Kirmach : 100, 444, 476
 Kirpal Singh : 42
 Kohand : 174, 175, 249, 526
 Koli : 445
 Kori : 445
 Krishna : 61, 63
 Kritpala : 20
 Kuchband : 445
 Kularan : 40
 Kumhar : 445
 Kumharmajra : 431
 Kundla : 9
 Kunjpura : 28, 29, 30, 32, 33, 34, 36, 37, 39,
 42, 43, 199, 208, 221, 301, 350, 364, 367,
 389, 444, 495
 Kunjpura Bund : 168
 Kurali : 354, 444
 Kuran : 45
 Kurana : 71
 Kurri : 132
 Kurar : 463, 464
 Kuru : 505, 506, 523
 Kurukshetra : 18, 61, 62, 63, 64, 67, 71, 72,
 87, 103, 156, 176, 180, 198, 200, 202,
 205, 208, 218, 226, 227, 234, 235, 240,
 335, 336, 337, 347, 348, 354, 392, 394,
 397, 406, 407, 410, 420, 433, 451, 452,
 453, 488, 490, 493, 503, 504, 505, 506,
 507, 508, 511, 514, 523, 526
 Kurukshetra Development Board, Kuru-
 Sarovar kshetra) : 64, 71, 490, : 490,
 508
 Kurukshetra Tank (Brahm Sar or Brahm
 Srovar : 64, 71, 450, 507, 508, 509, 511
 Kurukshetra University : 235, 270, 300, 347,
 392, 394, 397, 401, 407, 419, 474, 490, 511
 Kurus : 17, 18,
 Kushana : 18, 493
 Kushhal Singh : 40
 Kutail : 461, 463
 Kutawar : 9

L

 Labana : 445
 Ladwa : 3, 10, 29, 36, 37, 39, 41, 42, 43, 46,
 48, 56, 58, 66, 71, 106, 145, 153, 179,
 184, 192, 193, 128, 201, 208, 226, 227,
 265, 270, 354, 367, 371, 385, 410, 423,

429, 460, 463, 476, 501, 512
 Lahna Singh, Sepoy : 231
 Lahore : 26, 49, 104, 391, 394
 Laja Singh : 30
 Lake, General : 36, 40
 Lakhanpala : 20
 Lakhdara : 66
 Lakhmi Chand : 99
 Lakshmi : 505
 Lakshmi Commercial Bank Ltd. : 123
 Lal Singh : 32, 35, 36, 40, 498
 Lala Lajpat Rai : 49
 Land Alienation Act, 1900 : 189
 Land Improvement Loans Act XIX of 1883
 191
 Land Preservation Act, 1900 : 163
 Lyallpur : 104
 Life Insurance Corporation : 193, 194
 Linda : 7
 Local Rate Act, 1871 : 378
 Lockwood Kipling : 171, 172
 Lodis : 24
 Lohar : 445
 Lok Sabha : 454, 456, 458, 459, 462, 466,
 468, 469
 Lord Krishna : 506, 510, 511, 526
 Ludana Baba : 464
 Ludhiana : 168, 246
 Luhari : 463, 464

M

Machiwara : 28
 Madan Mohan Malviya : 486
 Madanapala : 20
 Madhyadesh : 17
 Madhya Pradesh : 362
 Madhuban : 437, 443
 Madhuban Cold Storage, Kutail : 203
 Madlauda : 193, 198, 226, 227, 265, 463, 464
 Madlauda Co-operative Marketing-cum-
 Precessing Society Ltd. : 201
 Madras : 181
 Mahabharata : 1, 2, 18, 62, 64, 381, 493, 496,
 500, 503, 506, 507, 508, 514, 526
 Maharashtra : 182
 Mahadaji Sindhia : 33
 Mahavira, Lord : 69
 Maham : 35

Mahatma Gandhi : 48, 49, 483, 509
 Mahendrapala : 20, 517
 Mahipal : 522
 Mahmud of Ghazni : 20, 21
 Mahmud Shah : 23, 500
 Mai Chand : 99
 Mai Jian : 43
 Majra Jatan : 31
 Malak : 74
 Malerkotla : 38
 Malik Altuniya : 496
 Mallu Iqbal Khan : 23
 Mamdot : 38
 Man Singh Rahi : 50
 Manas : 464
 Manav Sewa Sangh, Karnal : 480
 Mandal (s) : 37, 281, 301
 Mandewala : 155
 Mandi : 66, 71
 Mandodri : 82
 Mandisor : 19
 Mangal Raghunath : 516
 Mangna : 40, 73
 Manjha : 40, 41, 43
 Manu : 381, 504, 507
 Maratha (s) : 27, 28, 29, 30, 31, 33, 34, 35, 36,
 37, 42, 74, 75, 281, 499, 501, 511, 514,
 516, 517, 525
 Markanda : 6, 7, 8, 69, 73, 132, 161, 166,
 167, 168, 518, 519
 Markanda Cold Storage, Shahabad (Shahbad) :
 203
 Markanda Distributary Bund : 133
 Mathura : 21, 381
 Mazhabi (s) : 445, 446
 Meerut : 14, 43, 44, 209, 219, 220
 Meh : 445
 Mehar Singh Nirmala : 29
 Mian Suliman : 24
 Michael-O' Dwyer : 48
 Mid-Term Elections, 1968 : 337, 465, 468,
 470, 471
 Mid-Term Elections, 1971 (Lok Sabha) :
 466, 470, 471
 Mid-Term Elections, 1972 (Vidhan Sabha) :
 466, 470, 471
 Mines Act, 1952 : 442

- Minhaj-ud-din-bin Siraj-ud-din : 496
 Mir Bakshi : 29, 32
 Miran Bahar Ali Shah : 495
 Miran Sahib : 66
 Mirghan : 206, 220
 Mirzapur : 182
 Mirza Jakan Shah Farkhunda Bakht ; 31
 Mirza Shafi ; 32
 Mith Singh : 43, 523
 Mohri : 218
 Montgomery : 104
 Morthali : 526
 M.S. Anney : 479
 Mughal (s) : 3, 12, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 37, 205, 223, 301, 494, 301, 503, 514, 516, 519
 Mugal Ali Khan : 30, 31
 Muhamdi Khan Mandal : 501
 Muhammad-bin-Tugluq : 22
 Muhammad Guri : 21, 521
 Muhammad Shah (A.D. 1719-1748) : 27, 28, 39
 Muhammadans : 48, 49, 223
 Muhammadan Law : 340
 Multan : 50, 75, 102, 111, 248
 Munak : 23, 117, 123, 124, 170 a, 170 b, 495
 Mundri : 125
 Murtazapur : 168
 Muqarrab Khan : 515
 Muslim (s) : 20, 21, 36, 48, 49, 54, 60, 63, 65, 66, 67, 68, 71, 74, 84, 87, 102, 104, 105, 106, 171, 173, 323, 374, 382, 449, 495, 516, 519, 520, 522, 523, 525
 Muslim League : 455
 Mustafabad : 9
 Muzaffargarh : 75, 102, 111, 248
 Muzaffarnagar : 1, 4, 7, 141, 219
- N
- Nabha : 38, 41
 Nadir Shah : 27, 39, 42, 500, 503
 Nagar Pukar : 479
 Nagar Sudhar Sabha, Karnal : 478
 Nagla : 463, 464
 Nai : 445
 Naisi : 463
 Najaf Khan : 31
 Nakom : 7
 Nalanda : 381
 Nalwi : 132
 Nana Rao : 34, 35
 Nanhera : 169, 463, 464
 Naraina : 124
 Nardak Distributary : 124, 125, 349
 Nardak Major Distributary : 122, 129
 Narwana : 194, 207, 218, 460
 Narwana Branch : 119, 122, 124, 126, 170, 286, 349, 490
 Narwana-Kaithal Branch Railway : 205
 Naryana : 63
 Nazir-ud-din-Muhammad Shah : 22, 23
 Nasir-ullah Mirza : 27
 Nat : 445
 National Dairy Research Institute, Karnal : 155, 226, 398, 503
 National Institute of Sports, Patiala : 409
 Naulakha Bagh : 98
 Naultha : 45, 70, 156, 270, 292, 464, 465, 467
 Nautanki : 98
 Nawadha : 169
 New India General Insurance Company Ltd.: 193
 New Karnal Co-operative Transport Society Ltd., Karnal : 211
 New Samalkha Co-operative Marketing-cum-Processing Society Ltd. : 201
 Nighdu : 198, 444
 Nihal Dey : 98, 495
 Nijabat Khan : 28, 30, 42, 503
 Nijabat Nagar : 42
 Nijalingappa : 471
 Nilu Kheri (Nilo Kheri) : 58, 90, 100, 110, 151, 153, 158, 173, 174, 175, 178, 181, 183, 192, 193, 198, 201, 207, 226, 227, 249, 265, 269, 323, 337, 347, 354, 367, 372, 373, 385, 386, 398, 410, 423, 433, 444, 463, 464, 465, 467, 487, 512
 Nisang : 199, 227, 265, 269, 460
 Nisang Drain : 350
 Nimbdi : 499
 Nizam Khan : 24
 Non-Cooperation Movement : 49
 Northern India Canal and Drainage Act, 1873 : 300

Northern India Motor Owners Insurance
Company Ltd. : 193

Nusrat Shah : 23

O

Ochterlony, General : 40, 498, 501

Omla : 161

Od : 445

P

Pabnawa : 444, 445, 464

Padha : 231

Padhana : 71

Pakistan (West Punjab) : 43, 50, 54, 66, 67,
68, 69, 74, 75, 76, 84, 93, 101, 102, 104,
105, 110, 111, 158, 171, 173, 180, 185,
248, 323, 449, 456, 485, 503, 512, 521

Pakistani Aggression, 1965 : 231, 337, 486

Palwal : 48

Panchayat Act, 1939 : 374

Panchayat Brahmnian, Kurukshetra : 488

Pandavas : 18, 493, 496, 505, 510, 514, 518

Panina Kalan : 28

Panipat : 2, 3, 4, 5, 6, 8, 18, 20, 22, 23, 24,
25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35,
36, 37, 41, 42, 44, 45, 46, 48, 49, 57, 59,
61, 65, 67, 68, 69, 70, 71, 73, 74, 75, 90,
100, 101, 103, 106, 107, 108, 119, 121,
125, 126, 127, 128, 129, 135, 137, 138,
140, 141, 142, 151, 153, 156, 157, 161,
163, 169, 170 a, 171, 172, 173, 174,
176, 177, 178, 179, 180, 181, 182, 183,
187, 192, 193, 194, 196, 198, 200, 202,
203, 206, 207, 208, 218, 220, 224, 225,
226, 227, 233, 240, 248, 251, 261, 265,
269, 270, 271, 273, 278, 279, 282, 283,
285, 286, 291, 292, 293, 301, 315, 323,
334, 335, 336, 337, 340, 343, 344, 345,
347, 348, 349, 353, 354, 355, 356, 357,
358, 359, 360, 364, 367, 369, 373, 382,
284, 385, 386, 402, 407, 410, 414, 421,
422, 423, 429, 431, 432, 433, 438, 440,
442, 446, 451, 457, 458, 461, 463, 464,
465, 467, 472, 474, 476, 484, 485, 499,
500, 504, 513, 514, 515

Panipat Co-operative Industrial Union: 187

Panipat Co-operative Marketing-cum-

Processing Society Ltd. : 201

Panipat Co-operative Sugar Mills Ltd.,

Panipat : 151, 176

Panipat Electric Supply Company Ltd.,

Panipat : 176

Panipat-Gohana-Rohtak Railway : 206

Panipat-Jind Railway : 218

Panjab University : 103, 393, 395, 399, 402,
407

Panjabi : 59, 60, 361, 387, 472

Para : 9, 168

Parron : 36, 40

Partab Singh : 40

Partition : 43, 54, 67, 74, 93, 94, 101, 102,
105, 110, 141, 158, 171, 173, 180, 196,
235, 248, 272, 321, 323, 327, 344, 390,
398, 500

Parsurama : 505

Parvati : 62

Pasawal : 168

Passina Khurd : 23

Patiala : 1, 31, 32, 33, 34, 35, 36, 38, 40, 43,
44, 45, 46, 47, 167, 196, 208, 209, 217,
220, 422, 504

Pathrala : 122

Pathri : 65

Patti Kalyana : 226, 483, 484

Patti Kankra : 70

Paulastya : 525

Payment of Wages Act, 1936 : 341

Pearson, Lt. : 46

Pehowa : 3, 11, 19, 20, 29, 31, 32, 34, 40,
41, 43, 58, 62, 69, 70, 71, 73, 107, 153,
157, 161, 163, 167, 170 c, 184, 193, 199,
200, 201, 203, 207, 208, 226, 227, 240,
270, 283, 285, 292, 347, 354, 367, 371,
410, 420, 423, 451, 458, 460, 461, 464,
465, 467, 492, 505, 508, 516, 517, 518

PEPSU (Patiala and East Punjab States
Union) : 2, 4, 458

Pepsu Tenancy and Agricultural Lands Act,
1955 : 304

Phapherela : 8

Pharal : 72, 200, 240, 444, 445, 492, 508,
518

Phillaur : 44

Phulkian : 41

Phurlak : 28

Pindara : 508

- Pinjore : 163
 Pipli : 3, 10, 19, 70, 198, 207, 208, 224,
 226, 227, 235, 270, 334, 359, 503, 504, 521
 Polar : 23
 Powadh : 283, 285
 Prabhakara-varadhana : 19
 Praja Socialist Party : 459, 461, 466
 Prevention of Corruption Act : 332
 Primary Land Mortgage Bank Ltd., Karnal :
 192
 Prithvipala : 20
 Provincial Insolvency Act, 1920 : 341
 Provincial Small Cause Courts Act, 1887 : 342
 Prithviraja Chahamana (Chauhan) : 21, 521
 Ptlomey : 521
 Public Gambling Act, 1867 : 332
 Pundri, Farehpur : 48, 58, 66, 71, 72, 100,
 106, 145, 175, 193, 199, 225, 226, 227,
 265, 270, 292, 367, 372, 402, 410, 423,
 444, 457, 458, 460, 461, 464, 465, 467,
 492, 508, 518
 Pundrak : 463, 492
 Pujam : 73
 Punjab : 1, 3, 5, 18, 19, 20, 21, 24, 25, 26, 27,
 28, 29, 37, 39, 41, 44, 47, 48, 54, 76, 98,
 110, 167, 169, 171, 172, 178, 196, 220,
 246, 248, 329, 357, 361, 363, 382, 394,
 421, 438, 441, 444, 456, 458, 462, 474,
 475, 482, 484, 512, 519
 Punjab Abolition of Ala Malikiyat and
 Talukdari Rights Act, 1952 : 302
 Punjab Agricultural Produce Markets Act,
 1961 : 197
 Punjab Ancient and Historical Monuments
 and Archaeological Sites and Remains
 Act, 1964 : 221
 Punjab and Haryana High Court : 345
 Punjab and Sind Bank Ltd. : 193
 Punjab Backward Classes (Grant of Loans)
 Act, 1957 : 448
 Punjab Betterment Charges and Acreage
 Rares Act, 1952 : 301
 Punjab Bhudan Yajna Act, 1955 : 303, 305
 Punjab Commercial Corps Cess Act, 1963 :
 299, 300
 Punjab Debtor's Protection Act, 1936 : 190
 Punjab District Boards Act, 1883 : 378
 Punjab District Board (Temporary Constitu-
 tion Act), 1954 : 378
 Punjab Entertainments Duty Act, 1936 : 311
 Punjab Entertainments Duty Act, 1955 : 311
 Panjab Entertainment Tax (Cinematograph
 Shows) Act, 1954 : 314
 Punjab Evacuee Ordinance IV of 1947 : 106
 Punjab Excise Act, 1914 : 307, 332, 343
 Punjab General Sales Tax Act, 1941 : 309
 Punjab Gram Panchayat Act, 1952 : 342, 344
 Punjab Home Guards Act, 1947 : 336
 Punjab Land Revenue Act, 1887 : 287, 300
 Punjab Land Revenue Act No. 6 of 1956 :
 287
 Punjab Land Revenue Act XIX, 1958 : 287
 Punjab Land Revenue (Surcharge) Act,
 1954 : 297
 Punjab Land Revenue (Special Charge) Act,
 1958 : 298, 300
 Punjab Legislative Council : 457
 Punjab Local Option Act, 1948 : 307
 Punjab Motor Spirit (Taxation of Sales) Act,
 1939 : 312
 Punjab Municipal (Second Amendment) Act,
 1954 : 367
 Punjab National Bank : 193
 Punjab Occupancy Tenants (Vesting of
 Proprietary Rights) Act, 1952 : 302
 Punjab Olympic Association : 482
 Punjab Panchayat Samitis and Zila Parishads
 Act, 1961 : 375, 378
 Punjab Panchayat Samitis and Zila Parishad
 (Haryana Amendment) Act, 1973 : 379
 Punjab Passengers and Goods Taxation Act
 1952 : 313
 Punjab Professions, Trades, Callings and
 Employments Taxation Act, 1956 : 306
 Punjab Refugees Rehabilitation (Loans and
 Grants) Act, 1948 : 108
 Punjab Registration of Money Lenders' Act,
 1938 : 190
 Punjab Regulation of Accounts Act, 1930 :
 190
 Punjab Relief of Indebtedness Act, 1934 :
 190
 Punjab Reorganization Act, 1956 : 462
 Punjab Roadways, Amritsar : 217

Punjab Roadways, Jullundur : 217
 Punjab Roadways, Pathankot : 216
 Punjab Security of land Tenures Act, 1953 :
 302, 303, 304
 Punjab Small Town Committees Act, 1921 :
 367
 Punjab State Aid to Industries Act, 1935: 191
 Punjab State Co-operative Land Mortgage
 Bank Ltd., Jullundur : 192
 Punjab State Electricity Board : 175
 Punjab Tenancy Act of 1887 : 302
 Panjabi : 59, 60, 361, 387, 472
 Punjab Urban Immovable Property Tax Act,
 1940 : 308
 Punjab Vidhan Sabha : 456, 460
 Punjab Village Common Lands (Regulation)
 Act, 1961 : 447
 Punjab Weights and Measures Enforcement
 Act, 1958 : 204
 Purnaraja : 20
 Purus : 17

Q

Qamr-ud-din Khan : 39
 Qawi : 463, 464

R

Radaur : 29, 32, 58, 71, 106, 145, 193, 198,
 200, 226, 227, 270, 292, 356, 371, 407,
 410, 423, 446, 460, 461, 463
 Raghuir Cold Storage, Panipat : 203
 Raigarh : 445
 Raikot : 38
 Raipur Roran : 198
 Rai Singh Bhangi : 34
 Raja Dalip : 523
 Raja Jaula : 20
 Raja Kheri : 499
 Rajaund : 14, 18, 202, 265, 270, 292, 458,
 460, 461, 463, 464, 465, 467
 Rajasthan : 54, 71
 Rajpura : 167
 Rajputana : 18
 Rajput (s) : 20, 22, 42, 74, 79, 85, 93, 102,
 154, 230, 301, 519
 Rakshi : 123, 161, 166, 167
 Rama, Lord : 61, 63
 Ramayana : 63
 Ram Chandrapant : 516

Ram Rai (Ram Harda) : 508
 Ram Rajya Parishad : 456, 459, 461, 469
 Ram Saran Mazra : 70
 Rambha : 123, 460
 Ramgarh : 7
 Rana Majra : 169, 463, 464
 Rane Khan : 33
 Ranghars : 34, 45, 46, 74
 Ranjit Singh : 37, 43
 Rann of Kutch : 7, 8
 Ranwar : 444
 Rashtriya Vidya Samiti, Kaithal : 485
 Ratanheri : 8
 Ratta Khara Luqman : 8
 Rattan Kaur : 43
 Ravi Dass : 511
 Ravidasia : 445
 Rawal : 75
 Rawalpindi Victory Transport Company
 Pvt. Ltd., Ambala City : 213
 Razaqullah Khan : 515
 Raziyya, Sultana : 22, 496
 Rehgar (s) : 181, 445
 Remodelling of Western Jumna (Yamuna)
 Canal Project, 1959 : 123
 Representation of the People Act, 1950 :
 457
 Republican Party : 459, 461, 465, 466
 Republican Party of India (K) : 467
 Reserve Bank of India : 193
 Revised Western Jumna (Yamuna) Canal
 Project, 1959 : 124
 Rewari : 25, 261
 Right Marginal Bund, Markanda : 132
 Rigveda : 7, 9, 17, 505
 Risalu : 28, 499
 Roberts, Captain : 172
 Rohtak : 1, 3, 29, 40, 45, 47, 59, 178, 196,
 203, 206, 207, 208, 316, 350, 384, 438
 Rohtak-Gohana Bus Service (P) Ltd.,
 Rohtak : 215
 Rohtak Haryana Transporters (P) Ltd.,
 Rohtak : 216
 Rohtak-Hissar Transport Co., Rohtak : 215
 Rohtak-Hissar Transport Co. (P) Ltd.,
 Rohtak : 215
 Rohtas : 205

Ror (s) : 74, 83, 85
 Roshanpura : 460
 Rotary Club, Karnal : 481
 Rowlatt Act : 48
 R.S. Chaudhari Partap Singh Charitable
 Trust Society, Karnal : 492
 Ruby General Insurance Company Ltd., : 193
 Runchoe : 167

S

Sadar Heri : 132
 Sadashiv Rao Bhan : 28, 29, 42, 499
 Sadhan : 71
 Sadhaura : 27, 32
 Sadhaura Transport Company (P) Ltd.,
 Sadhaura : 213
 Safidon : 29, 36, 42, 121, 209, 508
 Safidon Drain : 350
 Saga : 41
 Saharanpur : 1, 2, 4, 7, 35, 42, 208, 219, 495
 Sahib Singh : 29, 30, 32, 36, 41, 42, 43
 Saidpur : 123, 161
 Saiyad (s) : 24, 61, 66, 67, 102
 Sakambhari : 20, 21
 Salani : 167
 Salar : 40
 Salar Faqir-ud-din : 515
 Salim Shah : 25, 515
 Salman : 23, 45, 49
 Salpani Kalan : 462, 463
 Salwan : 463
 Samalkha : 27, 44, 106, 107, 156, 157, 175,
 178, 184, 193, 199, 200, 207, 218, 226,
 227, 265, 270, 292, 354, 358, 364, 407,
 418, 457, 458, 461, 463, 464, 465, 467
 Samalkha Co-operative Marketing-cum-
 Processing Society Ltd. : 201
 Samana : 22, 24, 74, 446, 500
 Samana Bahu : 356
 Sambhi : 123
 Samora : 444
 Samru : 31
 Samyukta Socialist Party : 465
 Sanatan Dharma : 61
 Sanatan Dharam Sabha : 383
 Sanauli : 169, 208, 220, 358
 Sanauli Khurd : 463, 464
 Sanch : 444

Sandhu (s) : 67, 74
 Sangrur : 460
 Sankaravarman : 20
 Sanskrit : 361, 362, 382, 387, 488
 Sansi : 445
 Santhri : 71
 Saraswati : 5, 6, 7, 8, 9, 11, 17, 18, 19, 20,
 21, 23, 32, 40, 41, 42, 62, 73, 119, 121,
 125, 161, 165, 166, 286, 497, 504,
 505, 510, 516, 525
 Saraswati Canal : 119, 122, 126
 Saraswati Cold Storage, Shahabad (Shahbad):2
 Saraswati Drain : 132, 168, 350
 Saraswati Inundation Canal : 122, 129
 Sarera : 445
 Sarsa : 464
 Satkumba : 167
 Satluj : 7, 8, 9, 17, 18, 21, 22, 28, 36, 37, 170a,
 490, 497
 Satnam Transport Company (P) Ltd.
 Rohtak : 216
 Savitri : 82
 Sayyad Muhammad alias Miran Sahib : 502
 Scheduled Castes : 108, 356, 388, 404, 405
 437, 445, 446, 447, 448, 449, 450
 Second Five-Year Plan (1956-61) : 206, 361,
 429
 Second General Elections (1957) : 458, 469,
 470, 471
 Shadi Khan : 515
 Shah Jahan : 121, 221, 494, 519
 Shah Kamal : 498
 Shah Nahar : 121
 Shahabad (Shahbad) : 9, 10, 24, 29, 32, 33,
 42, 43, 48, 49, 56, 58, 67, 70, 71, 73,
 75, 90, 103, 106, 107, 133, 145, 153,
 156, 158, 165, 172, 173, 176, 184, 192,
 193, 198, 200, 201, 203, 207, 208, 218,
 223, 225, 226, 227, 265, 270, 292,
 315, 336, 337, 347, 354, 370, 385, 386,
 402, 407, 410, 423, 429, 431, 432, 433,
 457, 460, 462, 464, 465, 467, 476, 518,
 519
 Shabad-ud-din Balkhi : 497
 Shahab-ud-din Guri : 519
 Shambu Nath & Sons, Ltd., Shahabad (Shah-
 bad) : 177

- Shamgarh : 29, 32, 37, 39, 41, 42, 100, 356, 449
 Shamli : 30, 196
 Sharifgarh : 478
 Sheikh (s) : 68, 102
 Sheikh Chehli : 524
 Shekhupura : 75, 89, 102, 104, 110, 248
 Sheikh Tayab : 497, 498
 Shera : 31, 463, 464
 Sher Shah Suri : 205, 223, 523
 Sherhada : 464, 465, 467
 Shia (s) : 68
 Shiva, Lord : 61, 62, 70, 505, 510, 517
 Shiwalik Hills : 6, 8, 9
 Shiwaliks : 7, 154
 Shreddha Nand Anathalaya, Karnal : 479
 Shri Kurukshetra Restoration Society,
 Kurukshetra : 487, 511, 523
 Shri Sanatan Dharam Mahabir Dal, Karnal :
 486
 Shri Sewa Samiti, Karnal : 480
 Shri Sewak Sabha, Karnal : 488
 Sikandar Lodi : 24, 522
 Sikh(s) : 27, 29, 30, 31, 32, 33, 34, 35, 36, 37,
 38, 40, 42, 43, 48, 67, 72, 73, 75, 84,
 87, 102, 205, 281, 301, 374, 497, 502,
 503, 507, 512, 519, 523
 Sikligarh : 445
 Simla : 389
 Singh Sabha : 383, 455
 Sink : 476
 Sipahi Mall : 34
 Sirhind : 2, 24, 29, 30, 31, 42, 514, 519
 Sirsa Branch : 119, 122, 123, 124, 125, 126,
 127, 167, 286
 Sirsa Canal : 125
 Sita : 82, 520
 Sital puri : 498
 Siwah : 100, 463, 464, 499
 Siwan : 45, 65, 191, 226, 520, 525
 Siyana Sayadan : 32
 Socialist Party : 457
 Social Workers Home, Karnal : 478
 Solvex Oil and Fertilizers, Karnal : 177
 Somadatta : 526
 Somb : 121, 122
 Sonipat (Sonepat) : 3, 21, 30, 31, 34, 35, 121,
 178, 180, 209, 438, 500
 Sonkara : 431
 Sorath : 98
 South East Asia : 50
 Spooner : 493, 523
 Sri Kantha : 19
 State Aid to Industries Act, 1935 : 173
 State Bank of India : 173, 193, 273
 State Bank of Patiala : 193
 Strachey, General : 121
 Suakheri : 499
 Subhash Chandra Bose : 50
 Sultan Ala-ud-din Sikandar Shah (Prince
 Humayun, grandson of Firuz Shah) :
 Sultan Mahmud : 522
 Sultan Muhammad Angluli : 25
 Sultanpur : 444
 Sumer : 505
 Sunam : 22
 Satana : 464
 Swami Daya Nand : 393, 489
 Swami Shraddha Nand : 407
 Swastika Woollen Mills, Panipat : 439
 Swatantra Party : 459, 461, 462, 464, 465,
 470, 471
- T**
- Taga (s) : 74, 75, 85
 Tagu Brahman : 445
 Tabaqat-i-Akbari : 26
 Tahawwur Khan : 39
 Tajewala (headworks) : 122
 Taj-ud-din Yildiz : 22
 Tamsabad : 169
 Tangri : 132, 167
 Taraori Co-operative Marketing-cum-Pro-
 cessing Society Ltd. : 201
 Tarf Ansar : 73
 Tatar Khan : 23
 Tatanagar : 180
 Tejapala : 20
 Telugu : 387
 Teora : 526
 Thanesar : 3, 4, 5, 6, 7, 8, 9, 14, 18, 19, 20,
 21, 25, 26, 29, 32, 33, 34, 35, 36, 37, 38,
 39, 40, 42, 43, 44, 46, 48, 56, 57, 58,
 60, 61, 62, 64, 66, 67, 68, 70, 71, 73,
 75, 76, 90, 106, 107, 119, 125, 126,

127, 128, 129, 131, 132, 135, 138, 145,
151, 153, 157, 158, 167, 169, 171, 173
180, 184, 192, 193, 194, 198, 203, 220,
223, 226, 233, 235, 265, 269, 270, 271,
273, 279, 281, 282, 284, 285, 291, 292,
293, 301, 315, 334, 343, 344, 347, 355,
356, 367, 370, 381, 384, 385, 386, 407,
422, 423, 432, 433, 446, 457, 458, 460,
461, 463, 464, 465, 467, 474, 476, 478,
488, 493, 500, 503, 505, 506, 507, 508,
510, 511, 512, 516, 521, 522, 523, 525,
526

Thanesar Bund : 132

Thanesar-Pehowa Road : 407

Thaska Miranji : 132, 270, 463

Thehbari : 445

Theh Mujibullah : 13

Theh Polar : 18, 525

Third Battle of Panipat : 497, 499

Third Five-Year Plan (1961-66) : 206

Third General Elections (1962) : 459, 462,
470, 471

Thol : 132

Timur : 23, 24, 495

Tirawari (Taraori) : 21, 22, 27, 71, 106, 107,
193, 198, 203, 218, 226, 227, 292, 353,
364, 386, 444, 463, 478, 493, 514, 519,
520, 521

Tityana : 132, 209, 220

Tomara Gogga : 20

Tourist Co-operative Transport Society
Ltd., Ambala City : 213

Treaty of Surji Arjungaon : 3, 36

Tughlakpur : 23

Tulsi Das : 511

U

Uchana : 124, 365

Uchani : 365

Udai Singh : 40, 41, 497, 498, 517

Ugra Kheri : 100, 263, 499

Ujah : 28, 463, 464, 499

Ulughkhani Canal : 22

Umla : 7

Umri : 70

Uncha Siwana : 444, 463

Universal Victory Bus Service (P) Ltd.,

Ambala City : 215

Untouchability (Offences) Act, 1955 : 446

Uplana : 8

Uprising of 1857 : 44, 47, 494

Urdu : 48, 59, 60, 387, 472, 479, 486

Urlana : 132, 270

Urlana Kalan : 49, 461

Urnai : 70, 526

Usmanpur : 220

Usurious Loans Act, 1918 : 190

Uttar Pradesh (U.P.) : 1, 2, 4, 7, 54, 68, 132,
141, 182, 185, 196, 219, 220, 237, 239,
362, 480, 495

Uzbeg : 26

V

Vangaurd Insurance Company Ltd. : 193

Varanasi : 381, 526

Ved Vyasa : 505, 511, 526

Vena : 516

Village Panchayat Act, 1922 : 374

Vimukta Jatis : 356, 445, 447, 448, 449

Virk (s) : 67, 74, 75, 89, 102, 110, 111, 323

Visaldeva : 20

Vishal Haryana Party : 469

Vishnu : 20, 61, 63, 73, 505, 506, 511, 517,
520

Vrindavan : 480

W

War Loans : 47

Warren Hastings : 31

Wazir Ghazi-ud-din : 28

Wazir Khan Mughal Canal : 122, 223

Wealth-tax Act, 1957 : 318

West Bengal : 362

West Germany : 482

Western Jumna (Yamuna) Canal : 22, 118,
119, 121, 122, 124, 125, 126, 127, 136,
169, 170a, 170b, 170c, 286, 349, 350,
398, 413, 422, 495, 500

World War I : 47, 205, 334

World War II : 171, 219, 231, 334

Y

Yamuna : 1, 2, 3, 4, 5, 7, 8, 9, 17, 18, 21, 22,
23, 24, 27, 28, 30, 31, 33, 36, 37,

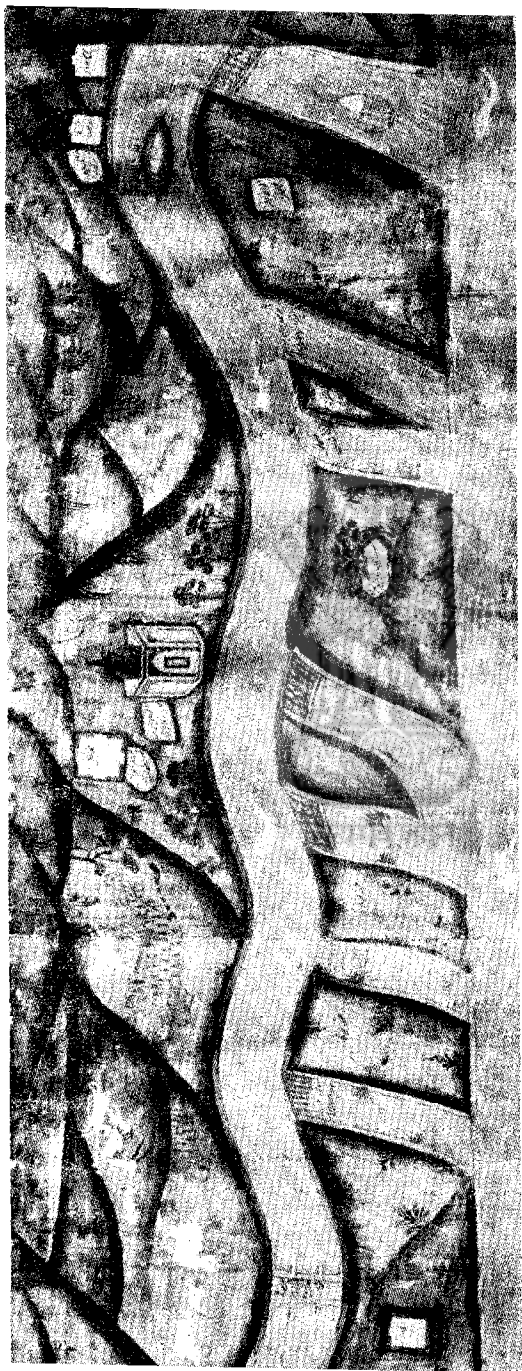
42, 61, 64, 87, 120, 121, 122, 123, 132,
134, 161, 166, 168, 16, 170a, 206, 208,
219, 349, 350, 500, 504, 514
Yamunanagar : 142, 316
Yasodharman Vishnu-wardhana : 19
Yudhishtira : 18, 496, 510, 514

Z

Zabita Khan : 30, 32, 33

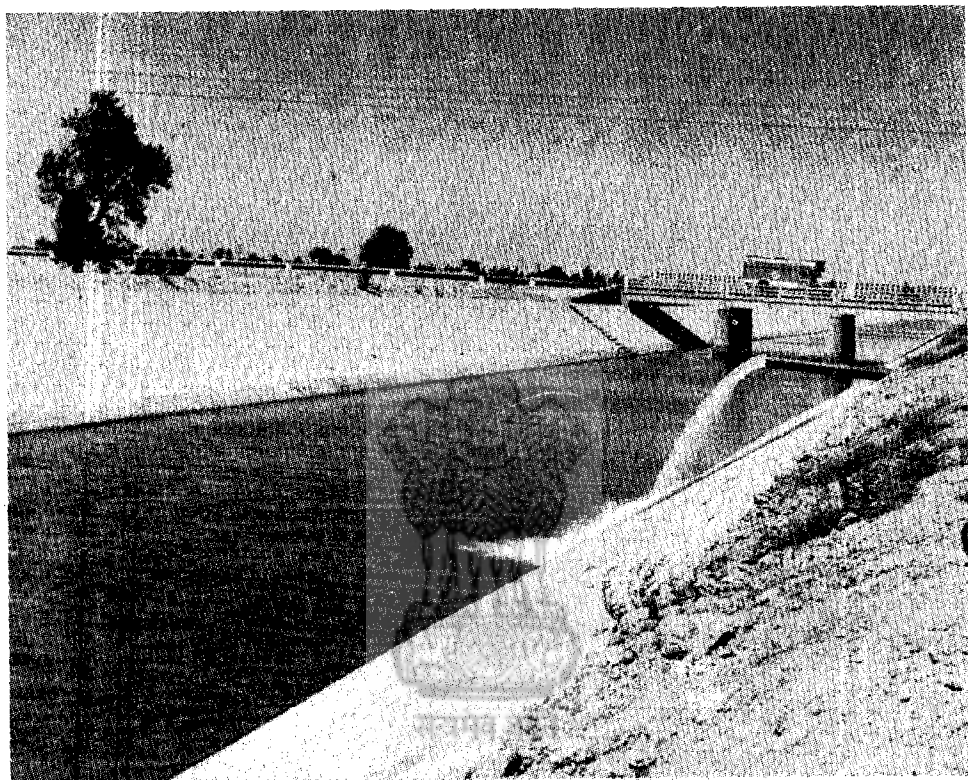
Zafar Nama : 23
Zain Khan : 29
Zainpur : 71, 123, 463
Zamindara Cold Storage, Shahabad (Shah-
bad) : 203
Zamindara Party : 456, 457, 469





(Courtesy : Director, State Archives, Hyderabad)

A section of the pictorial scroll, depicting the features of Western Jumna (Yamuna) Canal from Karnal to Delhi and believed to have been prepared in the reign of Shah Jahan (1627-1657); the deer are being hunted by a tiger in the vicinity of Karnal



Augmentation Canal, Karnal



Energisation of Tubewells



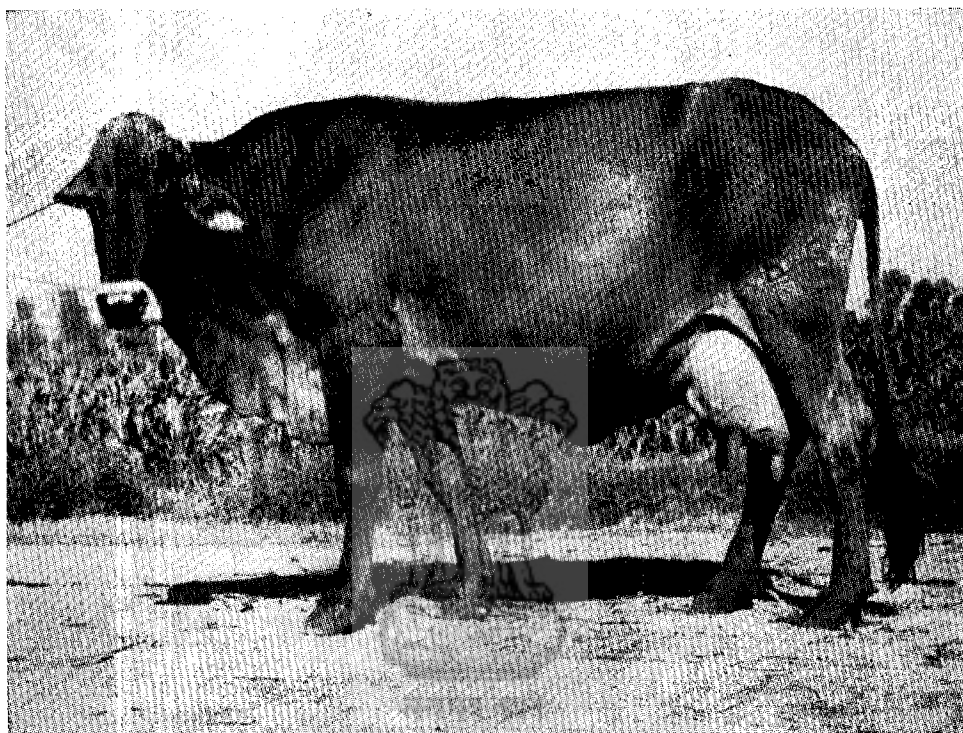
Mechanisation of agriculture—Harvesting through a combine



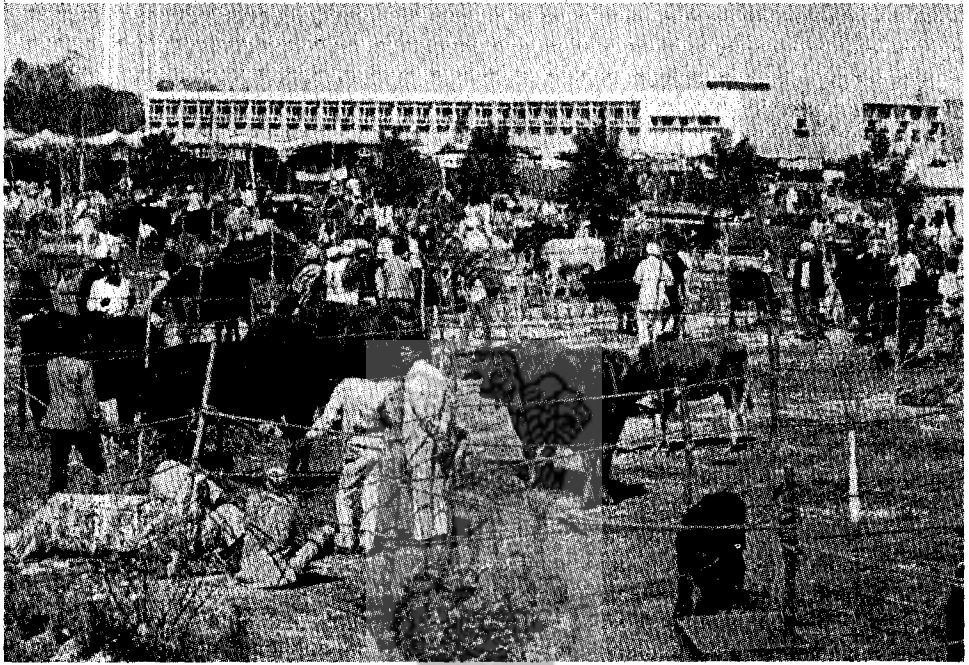
Paddy growing in Karnal



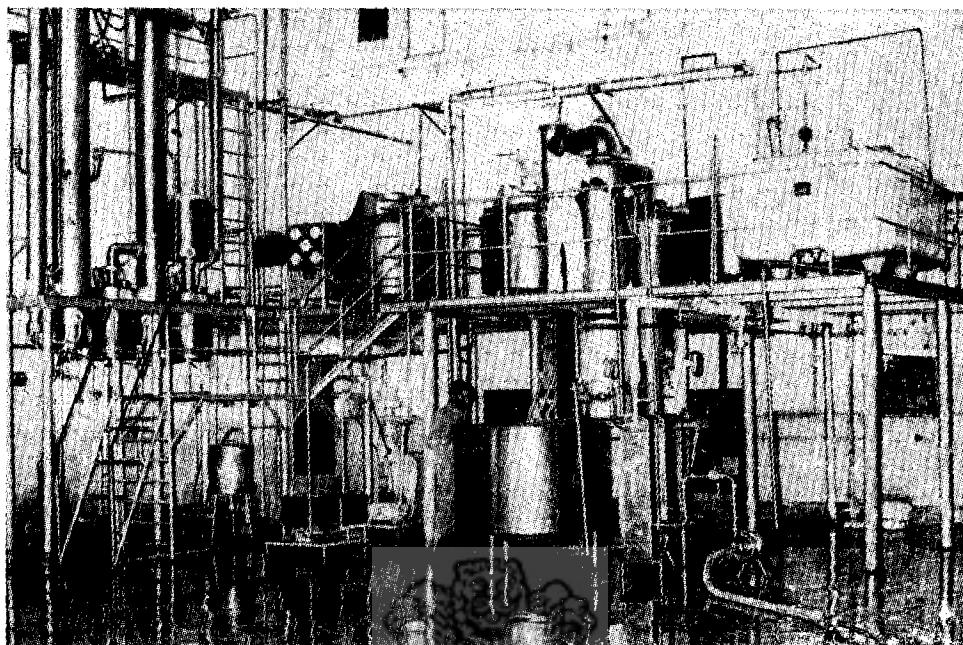
Bumper crop of an improved variety (Co. 975) of Sugarcane



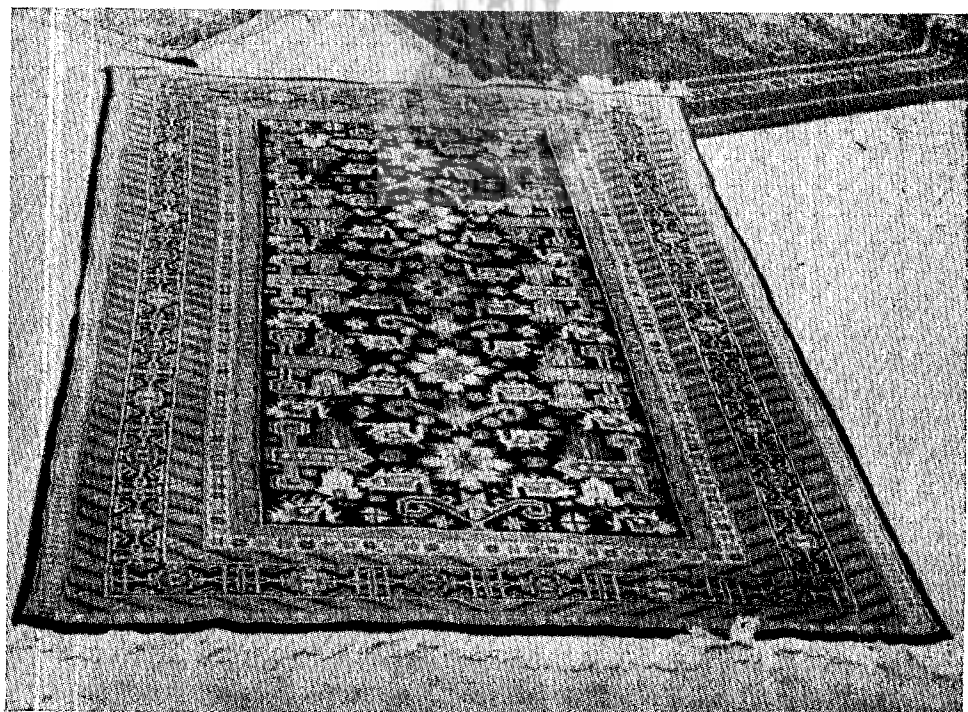
Karan Swiss 65, the Peak Milk Yielder (43 kg daily) of National Dairy Research Institute, Karnal



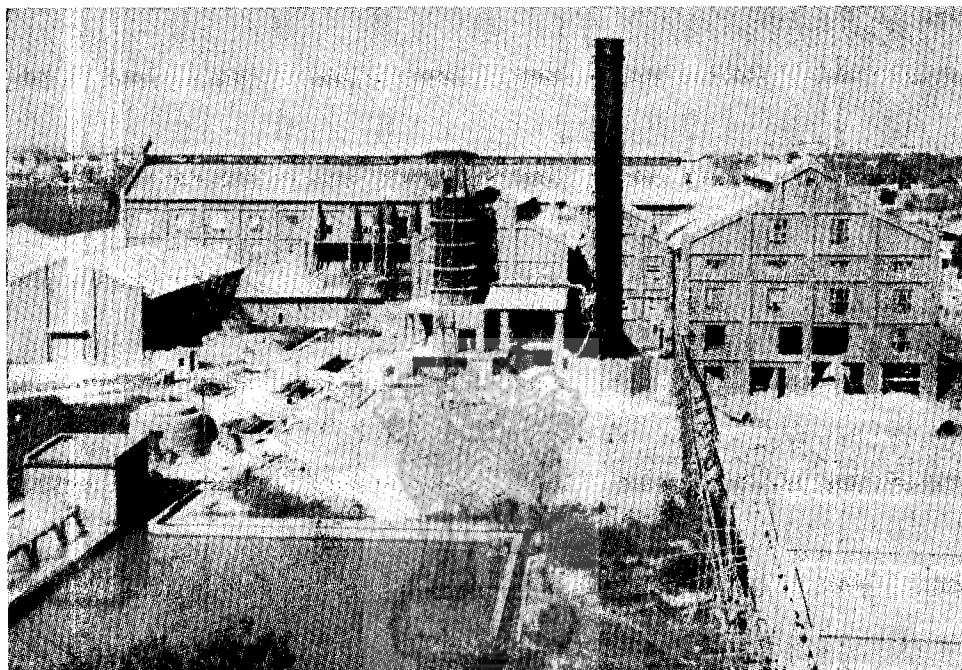
Cattle fair at National Dairy Research Institute, Karnal



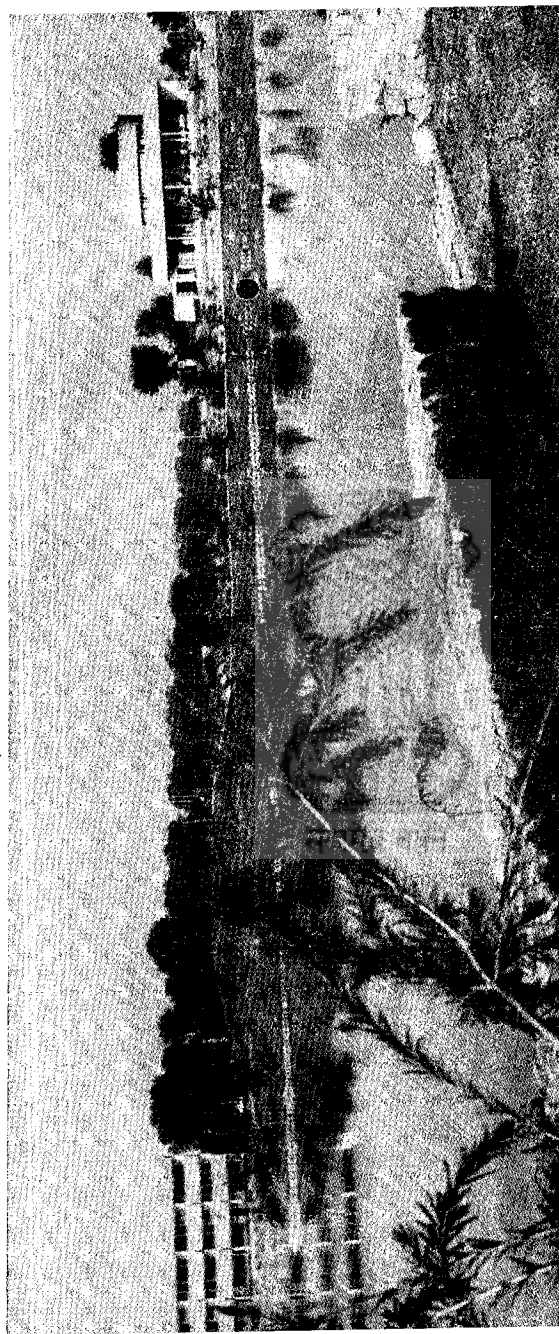
An inner view of the Dairy Condensing Plant, Karnal



A beautiful specimen of carpets manufactured at Panipat



Co-operative Sugar Mills, Panipat



*A view of the Chakravarty lake at Uchana, Karnal, with 'Whistling Teal' bar and restaurant and the nine-suite
(double-bed rooms) tourist bungalow overlooking the lake—a haven for tourists*



Blue Jay, a tourist respite, Samalkha



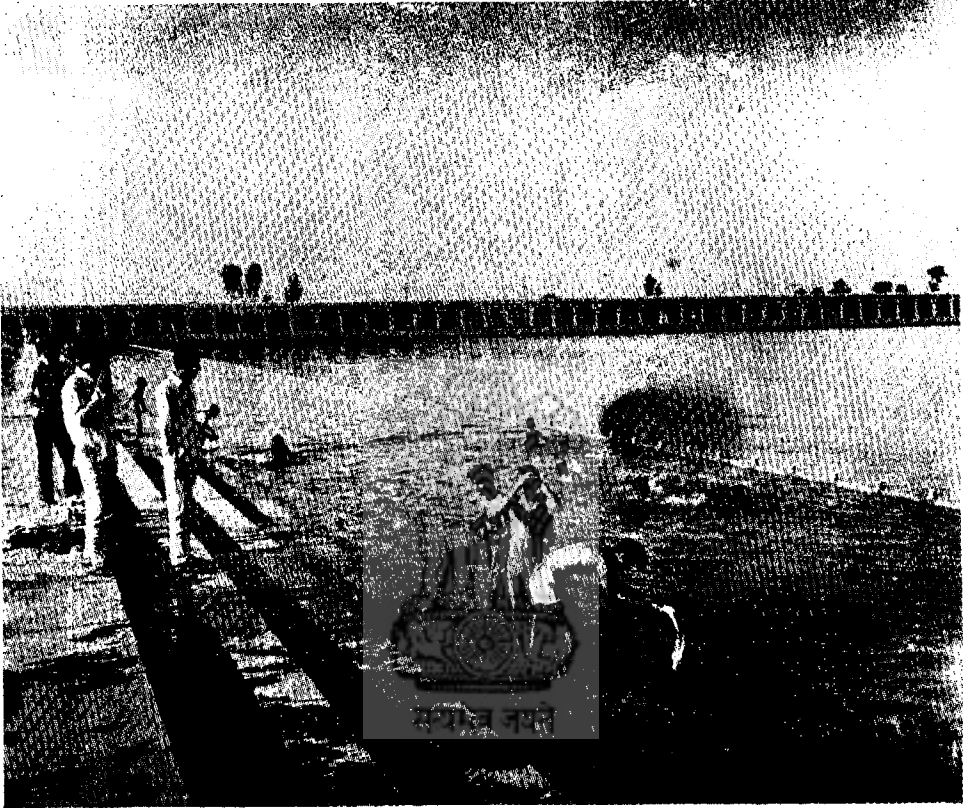
Bus Stand, Karnal



Uchani Tower, the symbol of 100 percent rural electrification in Haryana



Women Social Welfare Centre, Karnal



A renovated section of the holy Kurukshetra Tank (Brahm Sar or Brahm Sarovar)



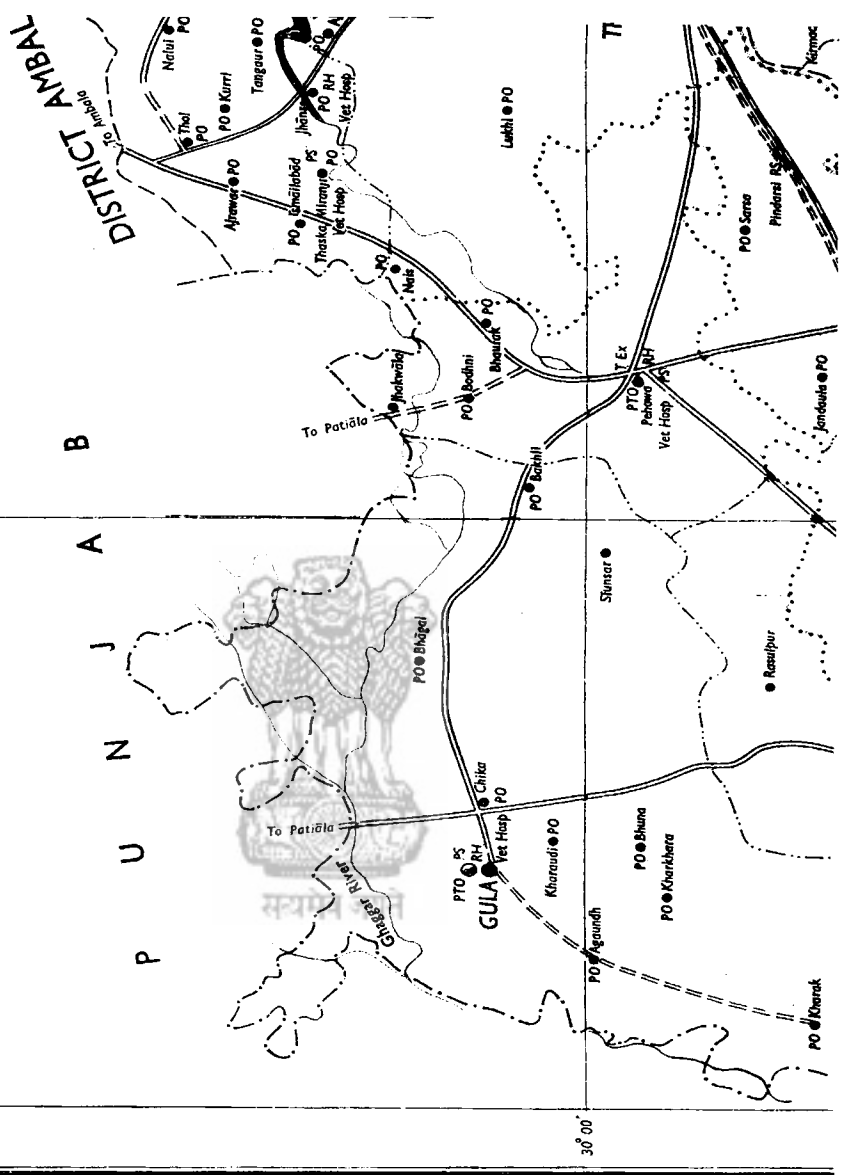
Sannihit Tank, Thanesar

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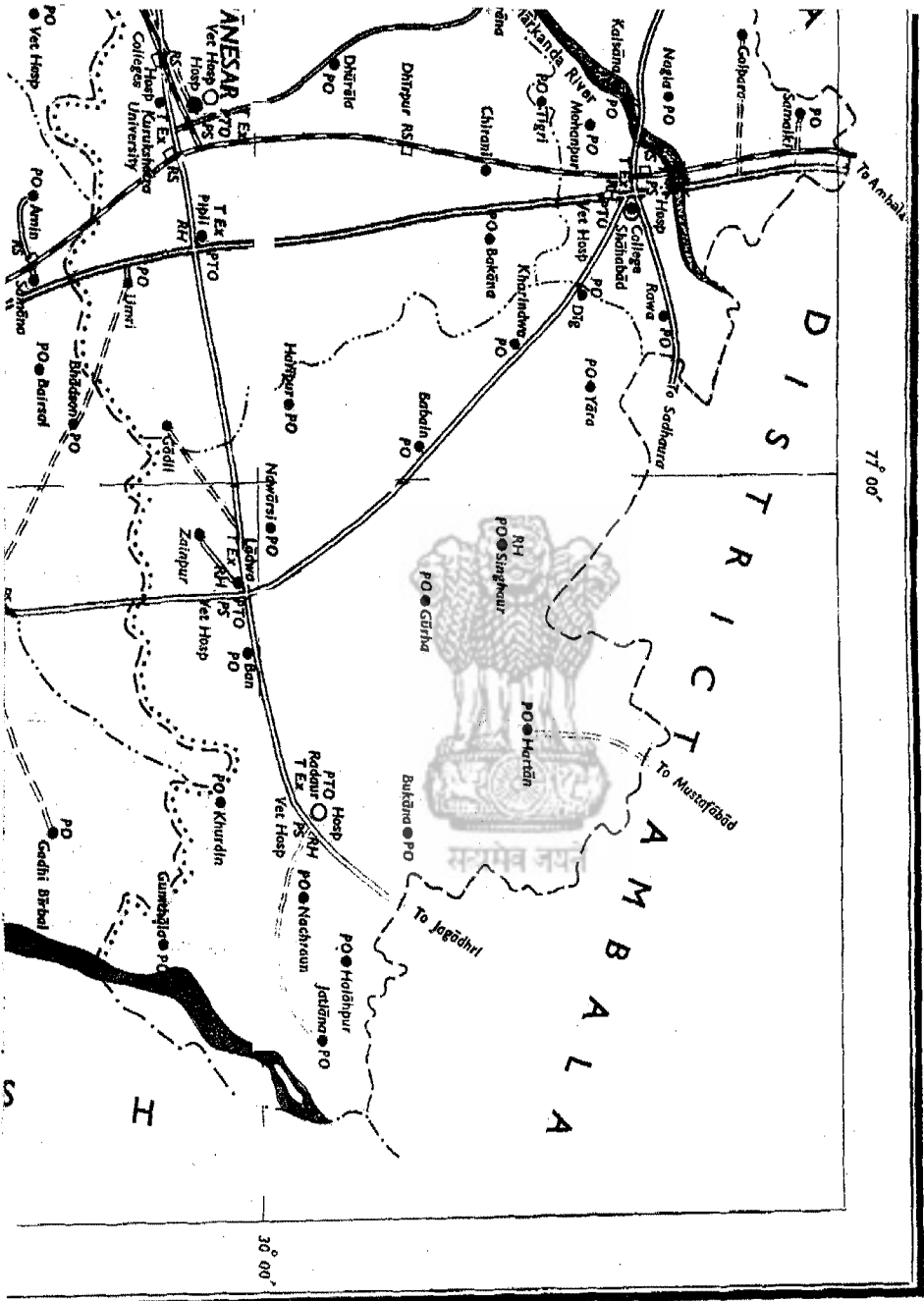
<u>Page</u>	<u>Para</u>	<u>Line</u>	<u>For</u>	<u>Read</u>
18	Footnote 2	2	Dtstrict	District
20	Footnote 1	2	1839	1889
36	1	2	Gurdat	Gurdit
38	Footnote 1	2	condscated	confiscated
39	3	10	Baluchis	Baluches
44	Footnote 1	1	Mallesau's	Malleson's
44	Footnote 1	2	coloned	Colonel
71	3	6	Sannihati	Sannihat
73	5	8	Jatlana	Jathlana
105	1	2	allotees	allottees
105	2	3	Partitition	Partition
110	4	2	Partitition	Partition
122	5	4	an	on
157	3	4	Pojects	Proiects
170(a)	2	7	gound	ground
170(d)	3	2	soiled	spoiled
210	4	2	XXXVII	XXVII
229	1	3	laboufers	labourers
254	1	5	Servic	Service
269	1	3	Wer	Were
269	Footnote 1	4	th	the
302	3	9	Propriertay	Proprietary
341	4	6	1947	1949
343	1	1	presnt	present
3	5	1	Ghandi	Gandhi
	4	1	Raziya	Raziyya
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	1	3	pases	praises
4	Footnote 3	4	Paints	Painted
517	Footnote 1	1	Haryana	Hariyana

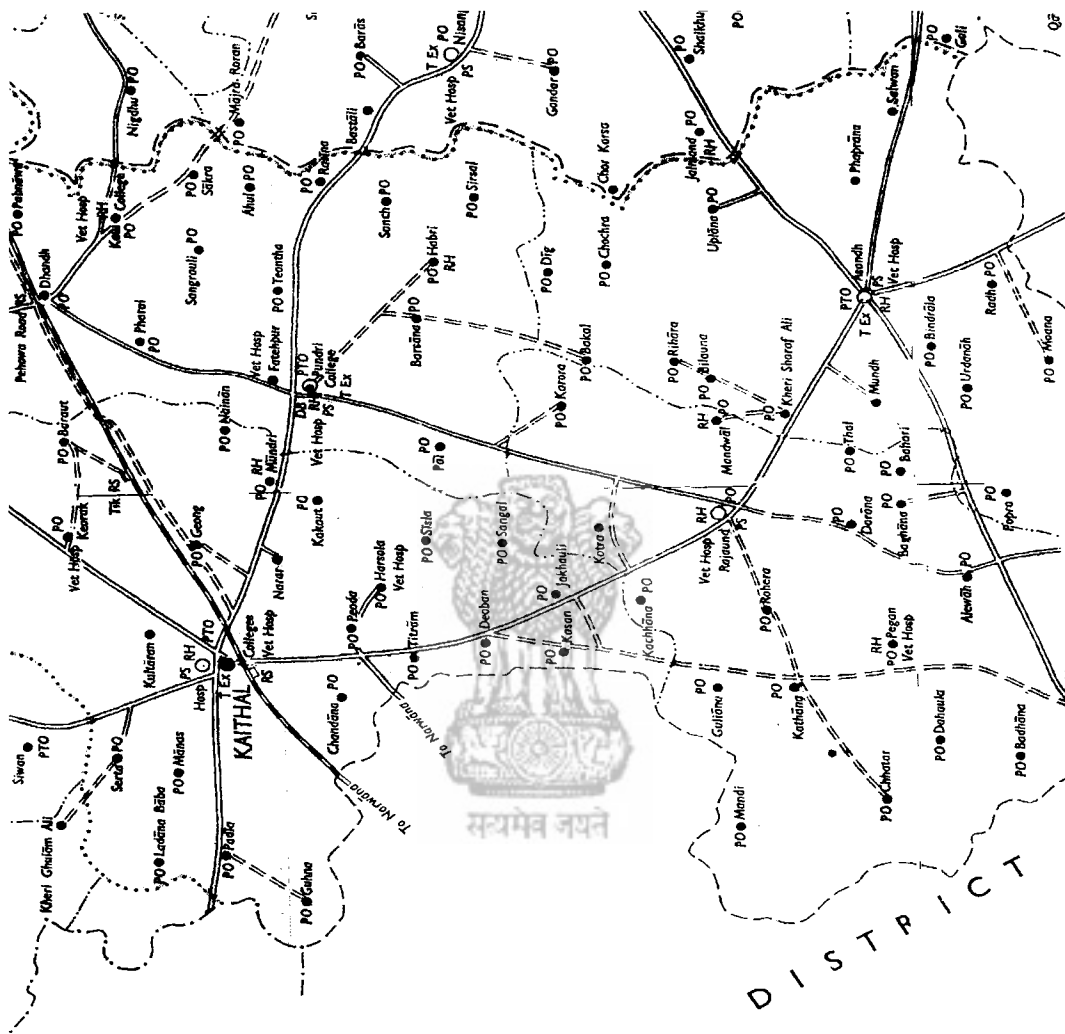
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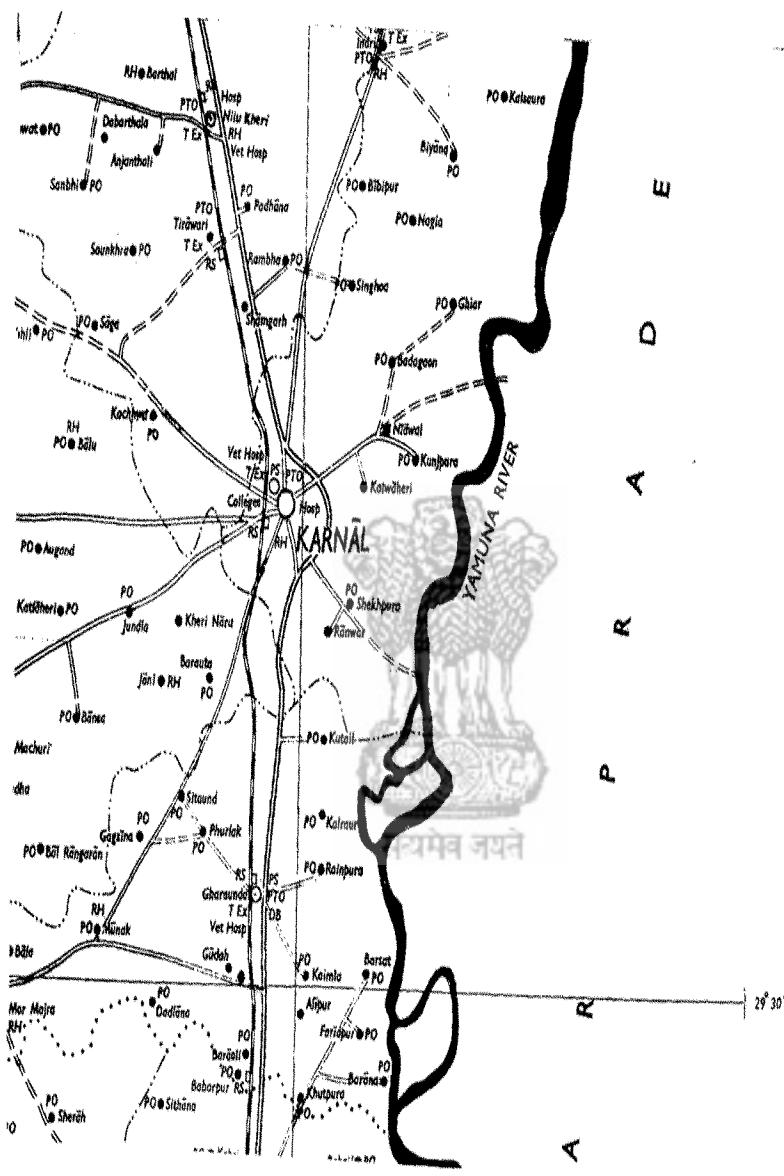
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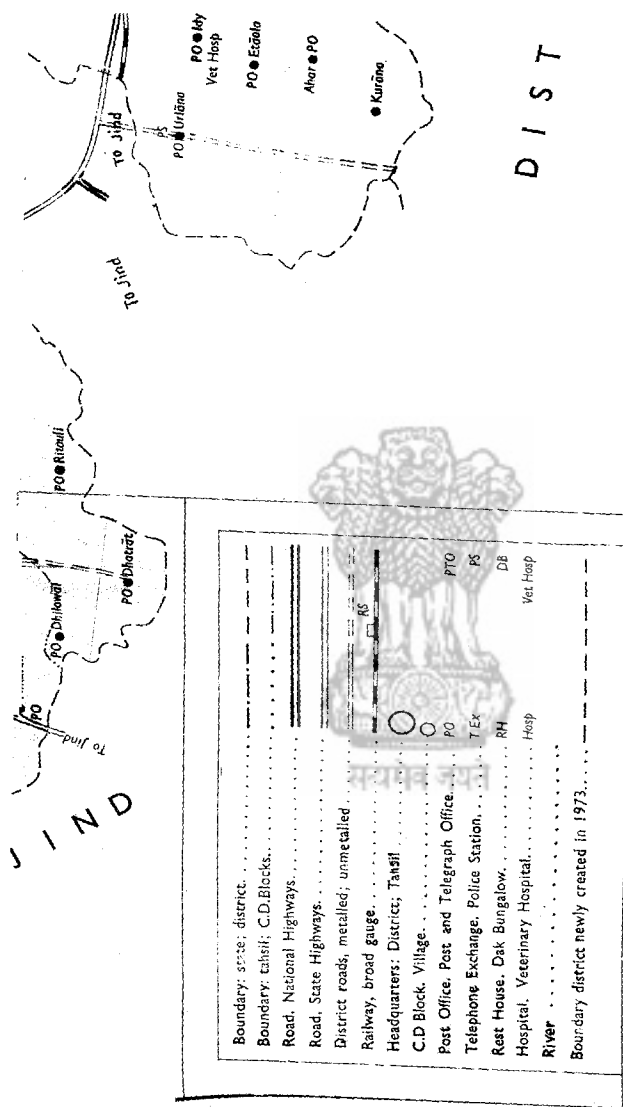


30° 00'









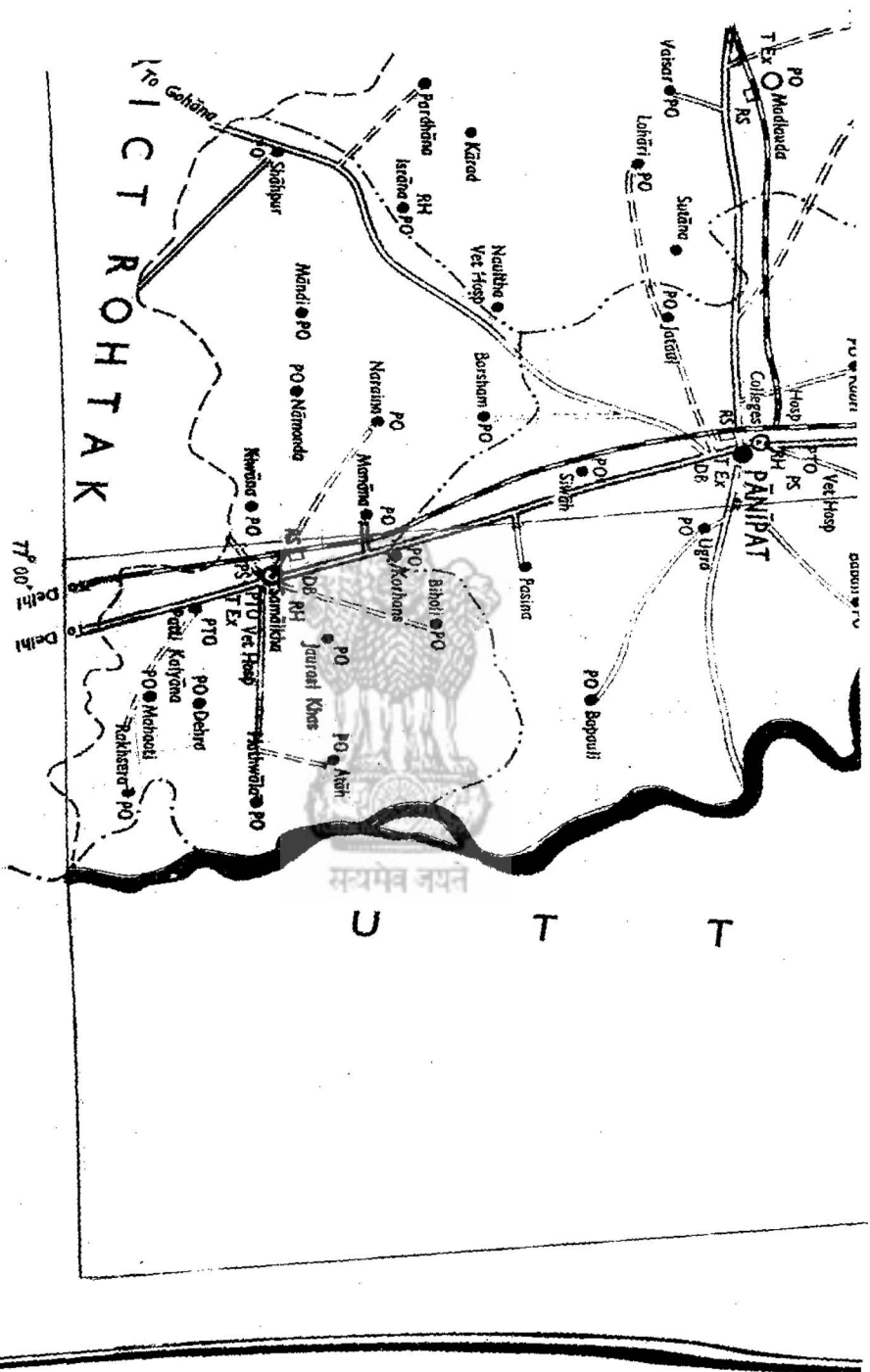
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1971

Scale 1-Inch =

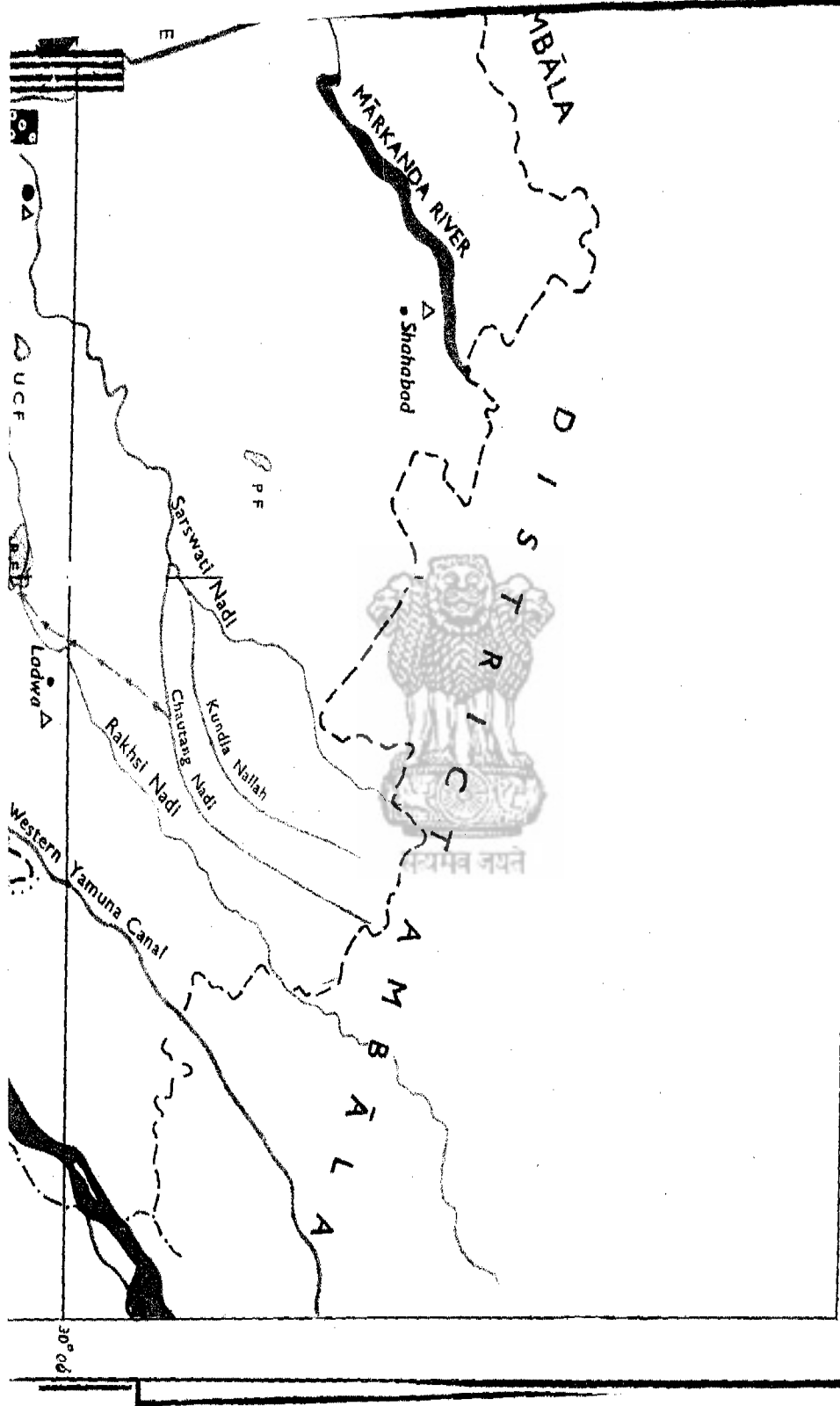


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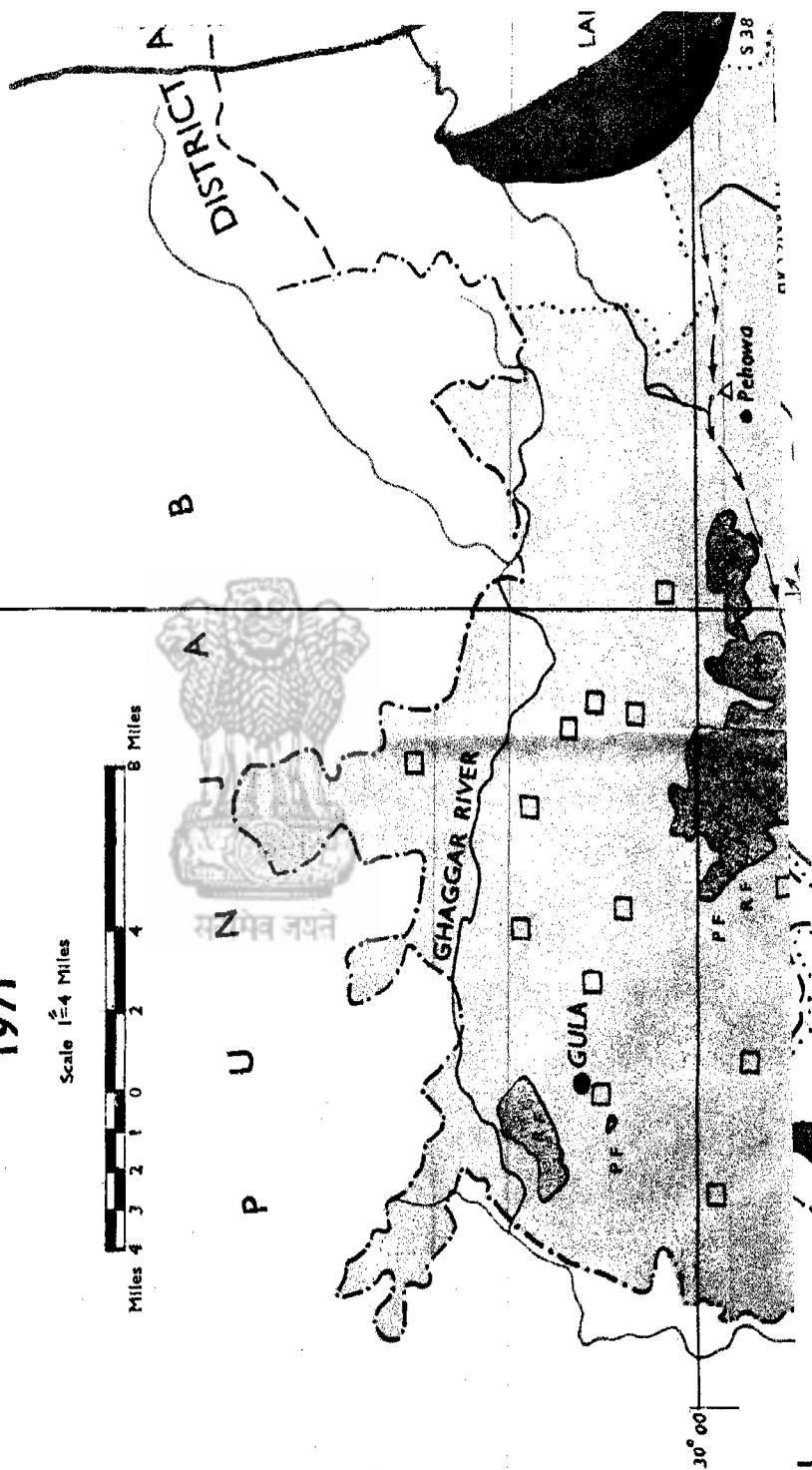
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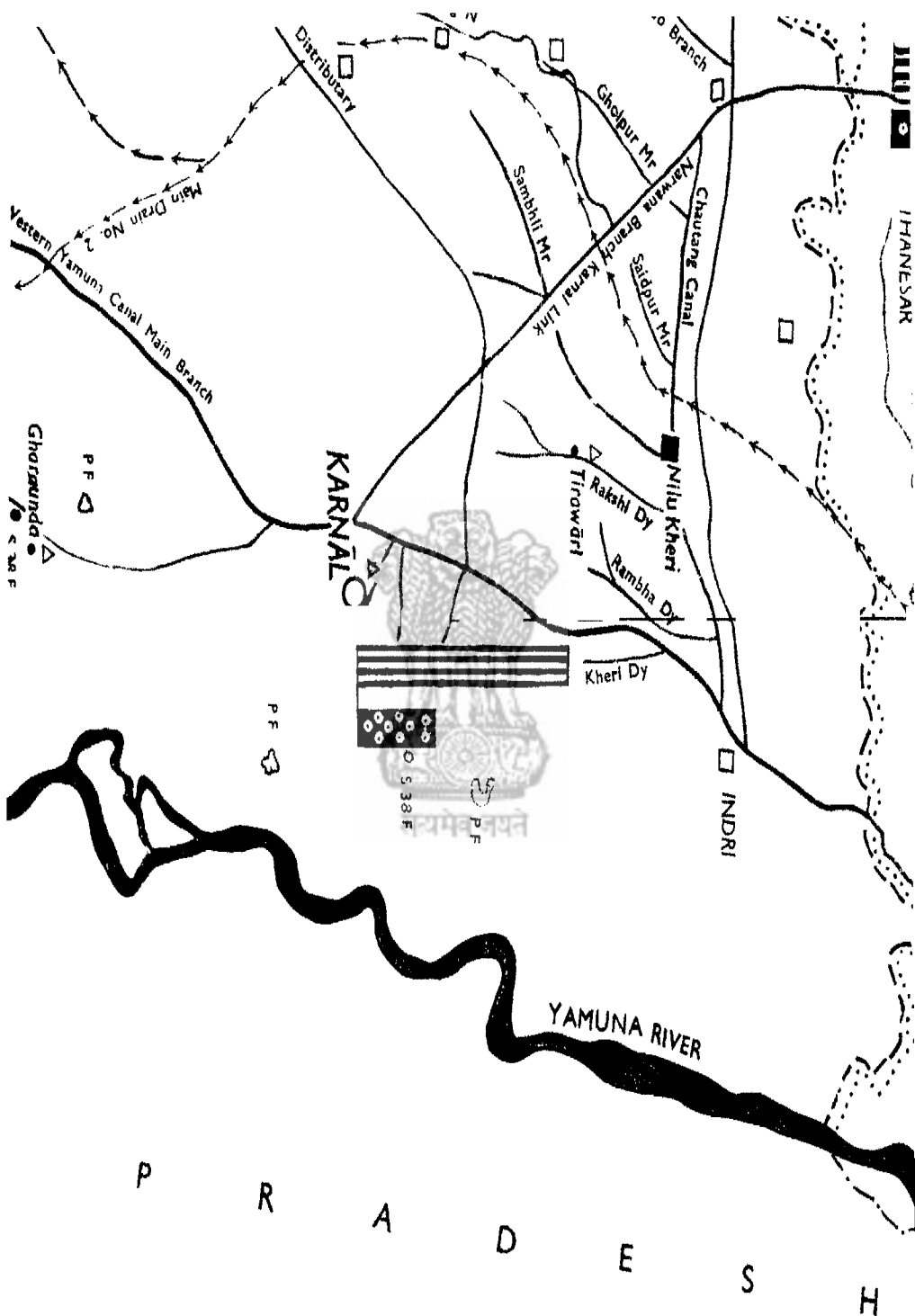
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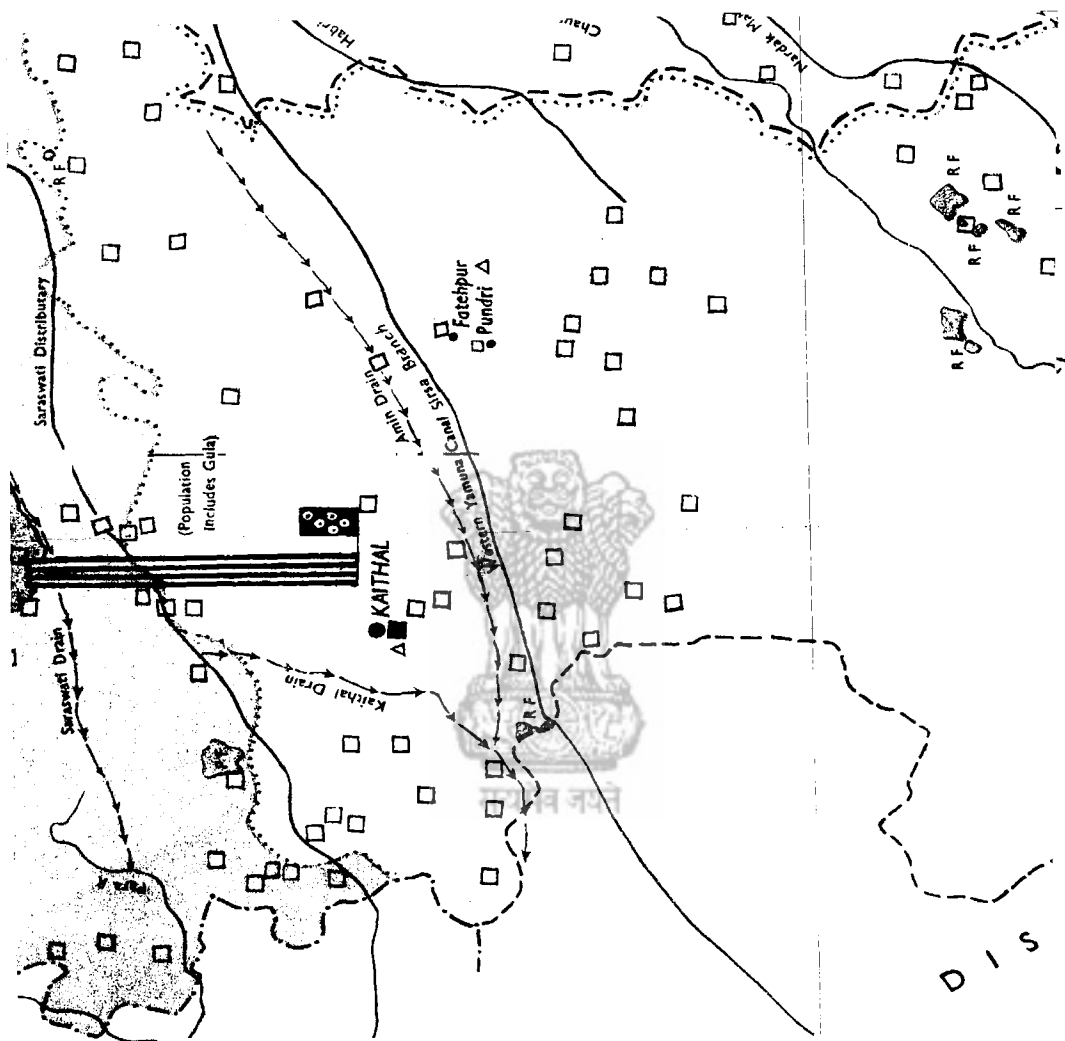


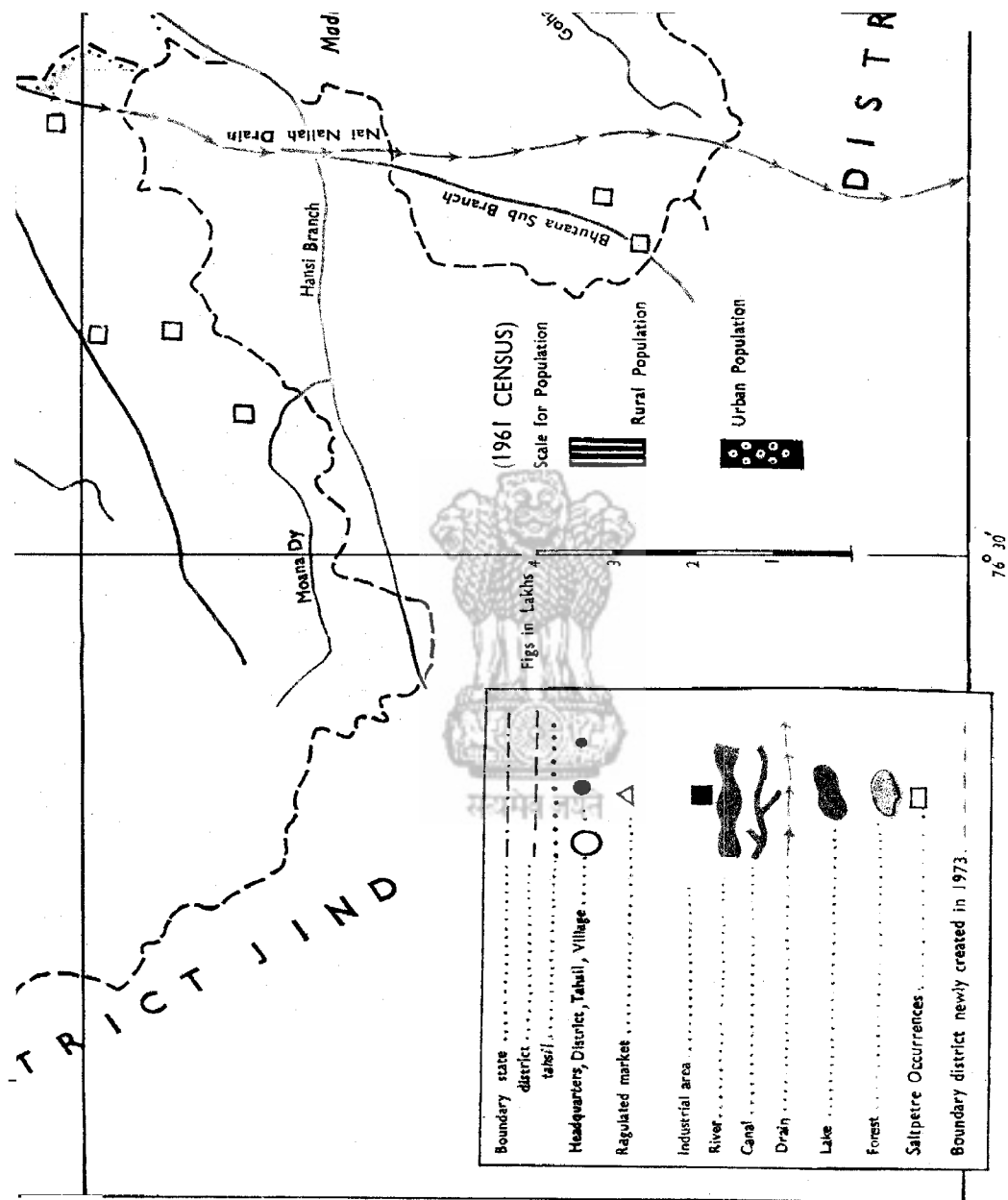
DISTRICT KARNĀL ECONOMIC MAP 1971

Scale 1"=4 Miles

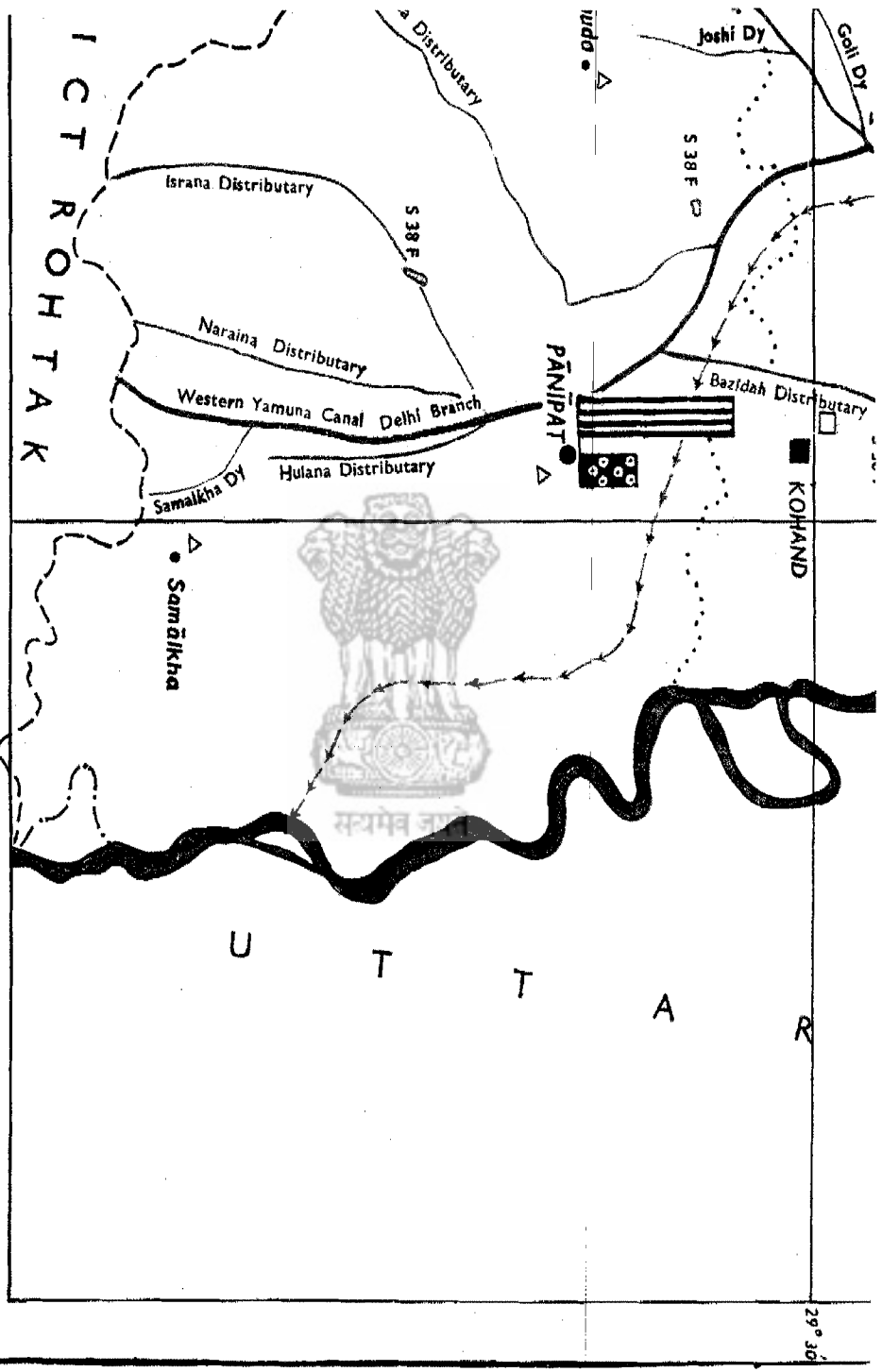








ICT ROHTAK



29° 30'